Does Your "Me" Influence How Our "I"S Connect: I-Sharing As An Antidote for Weight-Based Prejudice

DOES YOUR "ME" INFLUENCE HOW OUR "I"S CONNECT: I-SHARING AS AN ANTIDOTE FOR WEIGHT-BASED PREJUDICE

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Abstract

Previous research on I-sharing (i.e., shared subjective experiences) suggests that perceiving an overlap of the subjective self with another individual increases liking for that person (Pinel et al., 2006). Here I investigated the strength of I-sharing as it pertains to liking for and general attitudes toward heavyweight individuals. In the United States, the heavyweight are highly stigmatized and face prejudice and discrimination from multiple sources (Crandall, 1994; Puhl & Brownell, 2000; Puhl & Brownell, 2006). Previously, Crimin and Pinel (2008) demonstrated that I-sharing increased liking for a heavyweight partner. The current study sought to replicate and extend previous research by examining the role of stereotype relevant objective characteristics in I-sharing experiences with a heavyweight partner. Further, this study examined I-sharing's power to reduce prejudice toward heavyweight individuals as a group. Participants played a game of "Imaginiff" with a computer-generated confederate who self-identified as heavyweight. The game required participants to make in-the-moment judgments. Immediately upon making each judgment, participants were shown their interaction partners' responses. Making the same judgment as another person in this game amounts to I-sharing because it calls for gut-level, spontaneous reactions that tap into the subjective self. Participants' experiences with their partner varied such that some I-shared with their interaction partner, others received non I-sharing feedback from their partner, and some received no feedback. Further, the stereotype relevant objective characteristics of the partner varied, such that some participants interacted with a stereotype confirming partner and some interacted with a stereotype disconfirming partner. Following the interaction, participants rated their liking for their partner and reported their attitudes towards heavyweight people in general. Results indicated that participants who I-shared with their partner liked her more than those who did not I-share with their partner. Further, participants who I-shared with their partner reported higher feelings of positivity toward heavyweight individuals as a group on a feeling thermometer. Findings suggest that stereotype objective characteristics do not play a critical role in the I-sharing process. Implications for the reduction of prejudice toward heavyweight people are discussed.

Dedication

For my grandmother, Dalida, whose faith in my abilities continues to inspire my life

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Does your "Me" influence how our "I"s connect?: I-sharing as an antidote for weight-based prejudice

> If you've grown up in twentieth-century American society, you probably believe that being fat is a serious personal, social, and medical liability...Our society believes that thinness signals self-discipline and self-respect, whereas fatness signals self-contempt and lack of resolve. We're so accustomed to this way of thinking that many of us have never considered that there might be an alternative (Worley, 2008).

A cultural belief in the controllability of weight status plagues heavyweight individuals in the United States society. As exemplified by Mary Worley's (2008) portrayal, heavyweight individuals seem unwilling to comply to societal expectations of the ideal body type and face devalued identities as a result. Discrimination against members of this group remains so pervasive that even the most unlikely sources, such as doctors and family members, communicate messages of blame to heavyweight individuals (Crandall, 1990; Puhl & Brownell, 2000; Puhl & Brownell, 2006).

Given that prejudice toward heavyweight people continues to surface in negative and socially acceptable ways, one might expect the social psychological literature to be saturated with methods to reduce the negative prejudice toward this group. Unfortunately, the outlook for the reduction of negative attitudes toward heavyweight individuals remains unknown; only two relevant studies surfaced in a literature review (Robinson, Bacon, & O'Reilly, 1993; Weise, Wilson, Jones, & Neises, 1992), both limited in applicability because of sample constraints.

The current study asks whether the prejudice facing heavyweight individuals in the United States can be counteracted by I-sharing. Recent research conducted by Pinel and colleagues (Pinel, Long, Landau, Alexander, & Pyszcxynski, 2006; Pinel & Long, under revision; Pinel, Long, & Crimin, under review) suggests that shared subjective experiences, or I-sharing experiences, provide a unique opportunity for increasing positive attitudes toward stigmatized others. I-sharing theory argues that shared subjective experiences foster feelings of closeness between individuals and those positive feelings may overcome seemingly important differences, such as group membership and social stigma. This study aimed to replicate and extend upon preliminary research showing that I-sharing experiences fostered positive attitudes toward heavyweight women (Crimin & Pinel, 2008). Examining the usefulness of I-sharing in attenuating negative attitudes toward heavyweight women served as the main goal of this study.

First, I will review literature outlining the importance of I-sharing in establishing interpersonal connectedness. Stigma and the role of groups in daily life will then be discussed. Next, Pinel and colleagues' (Pinel et al., 2006; Pinel & Long, under revision; Pinel, Long, & Crimin, under review) research underscoring I-sharing's ability to foster intergroup liking will be highlighted. A discussion of the stigma faced by heavyweight individuals and the lack of effective prejudice interventions will follow. Finally, I will discuss preliminary research by Crimin and Pinel (2008) applying I-sharing experiences to relationships with heavyweight women and tie the findings to the goals of the current study. The methodology and findings for the current study will then be presented. Finally, I will discuss the results, their implications, and the future directions of this research.

I-sharing as a means for interpersonal connectedness

A basic tenet of human existence is that no one person has the ability to know how another person experiences the world (Yalom, 1980). No matter how close two people feel to one another, there exists no concrete way for them to know how the other experiences events from moment to moment. To bridge this gap, people must rely on verbal and nonverbal indicators of how their relationship partners experience the world, and these indicators may or may not reveal the true nature of a person's experience (Depaulo & Frieman, 1998). The impossibility that people know whether they experience life the same way and the inability of truly knowing firsthand another person's experience of life, renders all individuals existentially isolated (Yalom, 1980). Existential isolation fosters feelings of loneliness and disconnect from other people (Yalom, 1980; Pinel et al., 2004). These feelings run counter to the basic needs to know one's own beliefs as valid and to be connected to others.

I-sharing offers one means through which people can combat thoughts of existential isolation (Pinel et al., 2004; Pinel et al., 2006). *I-sharing* refers to the belief that an individual has shared his/her subjective experiences with another person (Pinel et al., 2004; Pinel, et al., 2006). The term derives from a distinction put forth by William James between the Me and the I aspects of the self (James, 1890/1918). The Me, as defined by James, is the objective self, the part of the self that is composed of all things describable about the person. Figuratively speaking, it is the self that the person sees when he/she looks in the mirror. It includes his/her appearance, likes and dislikes, reflections on past behavior, and any other part of the self that can be articulated to another person. In classic social psychological terms, the Me is an individual's self-concept. In contrast, the I is the subjective self; the part of the self that experiences life from moment to moment. The I is the agent, the "doer" that experiences the world; the active part of the self that exists only in the present, not the past or the future. James described the I as fleeting, conceptualized as passing states of consciousness (James, 1890/1918).

Accordingly, I-sharing refers to those times when people feel as though they shared the same subjective experience with at least one other person (Pinel et al., 2004; Pinel et al., 2006). Although people use many cues to infer whether they I-share with one another, the most convincing cues consist of simultaneous and identical reactions to the same stimulus (Pinel et al., 2004; Pinel et al., 2006; Pinel & Long, under revision). Two individuals who shiver simultaneously at the same gust of wind might sense that they I-shared with each other. A group of friends, who all laugh at a bizarre joke about a taxi driver, also are likely to feel as though they shared their subjective experiences.

Pinel and colleagues (2004) argue that I-sharing renders people as confident they can be that others experienced a moment in the same way they did. I-sharing relieves individuals' feelings of existential isolation and allows them to feel as if their I-sharing partner understands their experience. As a result of this realization, I-sharing fosters feelings of closeness and helps satisfy the basic needs of belief validation and connectedness to others (Pinel et al., 2006).

Of particular importance here is the role that I-sharing plays in fostering feelings of closeness and connection. Traditional theories of interpersonal connectedness concentrate on *objective* characteristics that promote closeness. These theories argue that people gravitate toward objectively similar others, such as people who share their beliefs, goals, hometowns, and even the color of their skin (Allport, 1954; Byrne, Clore, & Smeaton, 1986; Crocker, Major, & Steele, 1998). In James' (1890/1918) terms, individuals seek out others who share or seem similar with respect to aspects of the self associated with the Me. Pinel and colleagues (2004; Pinel et al., 2006; Pinel & Long, under revision) term these objectively similar individuals Me-sharers because of their overlapping Me.

Like sharing the objective self, sharing one's subjective self with another person should create positive feelings toward that individual (Pinel et al., 2006). Pinel and associated (2006) wondered what role I-sharing plays in interactions between individuals who are objectively similar (who according to traditional similarity approaches should like and feel close to each other), as well as I-sharing's role in interactions between objectively different people (who should not feel close or like each other). In a paper describing five experiments, these researchers first provided evidence for the phenomenon of I-sharing and then explicated its importance in establishing interpersonal connectedness amongst objectively similar and dissimilar individuals.

To establish the role that I-sharing plays in interpersonal closeness, Pinel and colleagues first hypothesized that when exposed to both subjectively similar and dissimilar individuals, participants would prefer I-sharing partners (subjectively similar others) to people with whom they did not I-share. Of particular interest, the authors examined the influence of Me-sharing in preference for I-sharing partners. Specifically, they wondered whether part of the reason that people are attracted to objectively similar others (Me-sharers) is the tendency to infer I-sharing based on objective similarity.

The researchers conducted a series of scenario based experiments asking participants to rate their liking for ostensible partners based on written descriptions. By exposing participants to two individuals, one with whom they shared some objective characteristic, such as the same hometown, and a second with whom they did not share an objective quality, and varying with whom participants I-shared, the authors demonstrated the role of shared subjective experiences in judgments of liking for those individuals. Across the three studies, results showed that participants indicated liking the partner with whom they I-shared more than the non-I-sharer, regardless of shared objective qualities. This finding persisted even when the authors manipulated the social desirability of shared subjective experiences (i.e., one study involved the shared experience of giggling at a fellow classmate when no one else in the class joined in on the laughter).

These findings provided preliminary evidence that I-sharing seems to overcome, or transcend, Me-sharing, but Pinel et al. (2006) extended their findings through two studies designed to capture real-life I-sharing situations. Both studies utilized computer methodology that made it seem as if participants interacted with two other people. In the first study, participants engaged in an online computer interaction in the lab that involved completing a series of word stems and seeing their partners' word stem completions. In this methodology, the researchers manipulated I-sharing by rigging the program so that one of the partners' (but not both) responses matched those provided by the participant.

This represented a shared subjective, in-the-moment, experience. As with the scenario based studies, participants liked the I-sharer more than the non-I-sharer, lending further credence to Pinel and colleagues' claim that I-sharing fosters liking. Moreover, individuals high in the need for connectedness with others (as measured by emotional reliance) reported liking the I-sharing partner more, and the non-I-sharing partner less, than other participants who did not strive for intense levels of connectedness. The authors argued that these findings supported the notion that I-sharing satisfies the need for interpersonal connectedness; after all, I-sharing most affected individuals who actively sought out interpersonal relations.

The final study in the paper provided further support of the theory of I-sharing by examining the role of existential isolation in shared subjective experiences. Because I-sharing relieves feelings of existential isolation, the authors predicted that existentially isolated participants would have stronger reactions to I-sharing experiences than those who responded to boredom or neutral primes. Consistent with this hypothesis, compared to those who received boredom or neutral primes, existentially isolated participants indicated liking the I-sharing partner more.

Through these experiments, Pinel and colleagues (2006) demonstrated the power of I-sharing to increase liking for others. The rise in liking occurred regardless of objectively similarity levels, hinting that I-sharing may provide a unique means for establishing closeness between people who may otherwise view each other as very different. As will be further explicated throughout this thesis, I-sharing provides a potentially useful and powerful means for increasing positive feelings towards marginalized and socially devalued individuals. Given that Pinel and colleagues' (2004; 2006) findings supported the claim that shared subjective experiences increase liking for others even when they do not share objective characteristics, the question becomes, what role does I-sharing play in interactions with individuals whose objective characteristics are socially devalued, particularly stigmatized individuals?

Stigma as a societal affliction

As initially defined by Goffman (1963, pp. 3), the term stigma refers to a deeply discrediting characteristic or attribute of an individual that prevents others from seeing him/her as a whole human. Though this definition originated over a half century ago, it remains relevant and consistent with current research on stigmatization (Major & O'Brien, 2005). A more recent addition to the concept of stigma by Crocker, Major, and Steele (1998) suggests that stigmatized people face chronic and pervasive negative prejudice. Therefore, a stigmatized individual possess a discredited identity that remains pervasive across situation and context, and this identity results in prejudice (Goffman, 1963; Crocker et al., 1998).

In his original writing on stigma, Goffman (1963, pp. 4) proposed three types of stigmatized identities: blemishes of individual character, tribal stigma, and abominations of the body. These classifications allowed him to find commonality amongst the experiences of stigmatized individuals by breaking the broad term, stigma, into groups with similar characteristics. Goffman labeled individuals seen as less than human as a result of moral or ethical misconduct with blemishes of individual character. Included in this class are alcoholism, mental illness, unemployment, and homosexuality. Tribal stigma applied to members of groups whose stigmatized attributes passed through lineage, such as racial and ethnic minority members. Finally, individuals with physical deformities, such as people with scars, amputees, and those of particular interest for this proposal, heavyweight individuals, fell into the final category of abominations of the body. Goffman argued that although stigma could be classified into categories, all stigmatized individuals experienced similar negative effects from being labeled and viewed as deviant by others solely because of the stigmatizing attribute (Goffman, 1963).

In a comprehensive review of the stigma literature, Crocker and colleagues (1998) argued that stigma visibility and perceived controllability crucially influence the lives of stigmatized individuals. Specifically, people with visible stigmas often cannot control whether others know about their identities, and, as a result, likely cannot utilize the powerful coping mechanism of concealing the stigma. The authors also argued for a poor prognosis of stigma management for individuals with ostensibly "controllable" stigmas; these individual are blamed for their own suffering and social devaluation (Crocker et al., 1998). The characteristics outlined by Crocker and colleagues (Crocker et al., 1998) prove particularly relevant here, given the group of interest: the heavyweight.

Considering the negative role that stigmatization plays in the lives of those with socially devalued characteristics, one may wonder how and why certain attributes become socially stigmatized. One answer to these questions stems from research on group membership. Humans are social beings that have a fundamental need to feel connected to others (Baumeister & Leary, 1995), a need that Pinel and colleagues (2004; 2006) argue I-sharing helps to fulfill, but belonging to a group of similar others also helps fulfill this need. As will be discussed in the following two sections, group membership plays an important role in self-protection. One consequence of this function is the stigmatization and devaluing of dissimilar others who are not members of one's social group.

Importance of group membership

Throughout social psychology, we see a theme emphasizing the importance of groups for social interaction. Research suggests that individuals readily seek out groups of similar others (Allport, 1954) and use those groups to feel good about themselves (Brewer, 1991; Tajfel, 1978; Turner, 1975). Belonging to a group helps construct the self and satisfies basic psychological needs (Baumeister & Leary; 1995; Baumeister, 1998). Further, people readily categorize and judge others based upon group membership and they do this to validate their own world view (Solomon et al., 1991). This section will highlight three social psychological theories of interest that emphasize the importance of group membership: The Need to Belong (Baumeister & Leary, 1995), Social Identity Theory (Tajfel, 1978; Turner, 1975), and Terror Management Theory (Solomon et al., 1991).

Baumeister and Leary (1995) argue that people have a fundamental need to belong and this need to form interpersonal attachments with others remains crucial to human survival. One cannot satisfy the need to belong by simply identifying with others; one must attain persistent contact characterized by caring and stability with a group. Baumeister and Leary (1995) suggest that people cannot live happy and fruitful lives in social isolation. The goal of belonging to a group of similar, caring others plays an integral part in life and all humans strive to achieve it (Baumeister & Leary, 1995).

According to Social Identity Theory, groups do not just help people feel connected, they also enrich their conceptions of self (Tajfel, 1978; Turner, 1975). In this framework, group identities and goals play a central role in the formation of the self. In the Social Identity Theory tradition, Brewer (1991) suggested that incorporating social identities into the self causes the outcomes of the group as a whole to influence the well-being of the individual and thus increases the relevance of group wide outcomes for the individual. Therefore, viewing the group as valuable becomes an important aspect of maintaining positive self-worth (Brewer, 1991).

Terror Management Theory (TMT) (Solomon et al., 1991) also emphasizes the importance of group membership. TMT suggests that people find solace from terrifying thoughts of mortality by identifying with a group of similar others (Solomon et al., 1991). From the TMT perspective, being valued by a valid group that shares one's world view put fears of death at bay by creating order and meaning in life and fostering self-esteem. Findings from TMT studies indicate that reminders of death cause strong adherence to world views. Because mortality salience primes result in a clinging to world views, reminders of death also result in increased prejudice towards members of the out-group, specifically those who challenge the validity of one's world view (Pyszczynski, Abdollahi, Solomn, Greenberg, Cohen, & Weise, 2006). By increasing prejudice towards the out-group, self-esteem remains protected because people who share one's world views are elevated in comparison to those who do not (Pyszczynski et al., 2006).

Although the theories of group membership described above differ in the rationale provided for the role that group membership plays in understanding the self, they all demonstrate the importance of groups in the human experience. Group memberships, for Baumeister and Leary (1995), satisfy a fundamental need to belong. Social Identity Theory (Brewer, 1991; Tajfel, 1978; Turner, 1975) stresses the importance of groups in forming a complete self-image. Finally, TMT (Solomon et al., 1991) argues that group membership results in a shared world view and allows for protection of self-esteem. These theories suggest that all people strive to belong to and maintain belonging in a group.

In the context of Goffman's (1963) original conception of stigma, researchers continually study the role that stigmatized identities play in individuals' lives. Throughout the decades since Goffman's (1963) work, group membership emerged as a major social psychological theme. Group membership not only plays important role in daily life (Baumesiter & Leary, 1995; Brewer, 1991; Solomon et al., 1991; Tajfel, 1978; Turner, 1975), but also enables the identifying and labeling of individuals as stigmatized (Allport, 1954; Goffman, 1963; Crocker et al., 1998; Fiske, 1998).

Group membership and stigmatization

Consideration of the role groups play in daily life (Baumesiter & Leary, 1995; Brewer, 1991; Solomon et al., 1991; Tajfel, 1978; Turner, 1975) indicates that prejudice against stigmatized individuals represents a powerful group-based social force. Research suggests that prejudice may result from organizing the world into categories of "us" and "them" (Allport, 1954; Tajfel, 1978; Turner, 1975). Members of one's social group are labeled "in-group" members, and members of another social group are labeled "out-group" members. When individuals in the out-group category get identified based upon some socially devalued characteristic, pervasive negative prejudicial attitudes, such as racism, sexism, and homophobia, often result (Fiske, 1998; Hilton & Von Hippel, 1996).

Social psychological research provides multiple experimental demonstrations of the importance of group membership and the role that group membership plays in forming prejudicial attitudes towards out-groups. On the most basic level, research shows that in-group preference exists even when groups are formed based upon some arbitrary characteristic. This research, called minimal group research, places individuals randomly into one of two groups and then asks participants to award prizes or points to members of their arbitrary group or members of another arbitrary group. Results consistently show that participants award members of their own group, whom they have never even met and do not have any expectation of meeting, more points than members of the out-group (Tajfel, 1970). These findings speak to the power of group membership's role on behavior because merely placing individuals into groups, without providing contact between members of that group, results in behavioral demonstration of preference for in-group members.

Sherif and colleagues' (1954) Robbers Cave experiment also provides a powerful example of how group forces dictate behavior. During this study, twenty-two Boy Scouts went to Robbers Cave State Park in Oklahoma for a summer camp. These boys, who came into the experiment with little or no previous social contact with each other, got divided into two groups. Upon separation into the groups, the researchers encouraged the teams to get to know their group members and strong group identification emerged in a seemingly natural manner.

These groups became powerful entities and strong preference for in-group members pervaded the boys' interactions. During a phase of the study where the experimenters facilitated inter-group rivalry, aggressive behavior towards members of the opposing group occurred on the basis of group membership alone. Highly prejudicial attitudes surfaced and some campers even refused to eat in the same cafeteria as the boys from the other group. Because the experimenters randomly formed the groups in the Robbers Cave study and the groups did not reflect pre-existing differences, the behavior that resulted demonstrates the power of the need to verify one's social group as meaningful.

That groups formed on arbitrary characteristics result in negative attitudes toward the out-group makes it perhaps less surprising that cases of prejudice and discrimination towards socially significant groups persist throughout the history of the United States. The continued denial of syphilis treatment to a group of Southern African Americans in the United States from 1937 to 1972 by the United State Public Health Department, even after the development of an effective treatment, caused hundreds of deaths in a group of socially overlooked and stigmatized individuals (Gamble, 1993). The problems of between group prejudice and discrimination remain so pervasive in the United States that the system of Affirmative Action originated in response to the institutionalized and intentional discrimination of minority group members, such as African Americans, in the workplace and academic environment (Glasser, 1988). Given the highly negative consequences of prejudice, studying the effects of prejudice on groups facing extreme stigmatization, including the heavyweight, and discovering new and effective ways to reduce prejudice remain important endeavors. The current study focuses on prejudice reduction through the process of I-sharing.

Interventions to reduce prejudice

The need for interventions to reduce negative attitudes toward stigmatized individuals continues. In his seminal work on the *Nature of Prejudice,* Allport (1954) outlined methods for prejudice reduction. In the years since Allport's (1954) work, researchers identified numerous methods for reducing negative attitudes toward members of different groups. Here I discuss the strategies of cross-categorization (Brewer, 2000), education (Duckitt, 1992), contact (Allport, 1954), and stereotype disconfirmation (Hilton & Von Hipple, 1996) because they represent a sampling of the diverse methods used in the field. Further, until now research on reduction of prejudice toward heavyweight individuals focused exclusively on education about the role of genes in weight-status and the strategies discussed in this section highlight some of challenges unique to the process of reducing weight-based prejudice.

Consistent with the Social Identity Theory perspective, the process of cross-categorization acts as one means for reducing intergroup tensions and prejudice (Brewer, 2000). This perspective suggests that the crux of prejudice lies in the social identities that encompass the self. These social identities magnify between group differences such that the "us," in-group members, seems different from "them," out-group members. To reduce the prejudice resulting from in-group/out-group comparisons, social identity theory researchers suggest incorporating aspects of the out-group into one's own identity (Brewer, 2000). In a laboratory study where participants assumed membership in either a single group or two different groups, Marcus-Newall, Miller, Holtz, and Brewer (1993) found that people assuming two different group memberships showed significantly less group based bias as compared to participants assigned to only one group. Identifying as a member of two groups reduced the differences that seemed so salient in the context of single group identification. These findings suggest that bridging group divides and taking on multiple identities may serve as a useful mechanism for eliminating derogation of the out-group.

Education may also serve as an antidote for prejudice (Duckitt, 1992; Hilton & Von Hippel, 1996) and this method of prejudice reduction becomes particularly important for research on heavyweight individuals, as will be discussed further in the next section. Proponents of prejudice reduction via education believe that prejudice results from a lack of information about the stigmatized group and its members' socially devalued characteristics (Allport, 1954; Fiske, 1998; Hilton & von Hipple, 1996). Using education as an antidote for prejudice reduces the blame associated with a stigmatized identity by allowing the prejudiced individual to better understand the origin of the affliction. Although education often involves simply providing individual participants in research studies with information about the affliction of a stigmatized group, Duckitt (1992) proposed that mass education of the larger society through media and governmental agencies may facilitate reduction of prejudice on a larger scale.

The classic Robbers Cave experiment (Sherif et al., 1954) demonstrates multiple means of prejudice reduction. In the last phase of the Robbers Cave study, the two groups of boys participated together in a series of joint tasks. These tasks focused on achieving goals that required the efforts of all the boys. By creating these superordinate goals, Sherif's team reduced the hostility between the groups and created peaceful interactions that did not result in the verbal displays of prejudicial attitudes that characterized previous interactions. The idea of forming superordinate goals, or creating goals that can only be achieved if members of both groups cooperate, remains a popular intervention for between group prejudice.

Sherif and colleagues (1954) Robber's Cave study also provides an example of one of the most researched methods of prejudice reduction available: intergroup contact. In his treatise on the *Nature of Prejudice*, Gordon Allport (1954) proposed the contact hypothesis. According to Allport (1954) four conditions must be met in order to achieve prejudice reduction through the means of intergroup contact. First, there must be equal status between the groups. Second, both groups must work to achieve common goals. Also, no competition should exist between the groups. Finally, the contact should be approved by both groups.

A recent meta-analysis of 200 studies suggests that contact between groups does indeed result in reduction of prejudice (Pettigrew & Tropp, 2000). This meta-analysis included a wide range of studies (laboratory, observations, and survey studies) with varying measures of contact (self-reported, assumed, and observed), as well as an array of prejudice measures (self-report surveys, social distance, and observation). Across the studies, researchers identified a significant negative effect size (Cohen's d=-.42; which is roughly equivalent to a mean r=-.20). Although small to medium in size, the authors argue that the finding is robust and demonstrates that by fostering intergroup contact, similar to the contact created in Sherif's Robber's Cave study, prejudice reduction reliably occurs in a variety of social groups, including gender groups, groups formed based upon sexual orientation, racial groups, and minimal groups created for research studies (Pettigrew & Tropp, 2000).

A final method for prejudice reduction views prejudice as the inclination to engage in stereotypic processing of members of a specific group (von Hippel, Sekaquaptewa, & Vargas, 1995). If prejudice stems from the tendency to judge and process information based upon stereotypes, it follows that challenging the stereotype about a group serves as ones means to reduce prejudice (Hilton & von Hippel, 1996; Weber & Crocker, 1983; Wyer, 2004). In research on this method of prejudice reduction, individuals encounter exemplar members of the stereotyped group in a manner that *challenges* or *disconfirms* stereotypes about the group (Hilton & von Hipple, 1996).

To understand the process of prejudice reduction via stereotype disconfirmation, one must consider the baseline tendency for people to seek out stereotype *confirming* information from stigmatized individuals, so as to protect their own in-group identity. This research suggests that seeing out-group members as representative of stereotypes allows people to maintain positive views of the groups to which they belong (Hewstone, 1990; Hewstone & Jaspers, 1982; Johnston, 1996; Miller & Ross, 1975). Therefore, the process of stereotype disconfirmation may only enable prejudice reduction when people are particularly motivated to process the stereotype disconfirming information (Wyer, 2004).

Wyer (2004) argued that when motivated to enhance the self, people also hold a stereotype disconfirming bias. This bias surfaces when it is beneficial to view a stigmatized group in a more positive manner. For example, a person who sees herself as unprejudiced towards a particular group might be motivated to seek out stereotype disconfirming information from stigmatized individuals as a method for stereotype revision. By seeking out stereotype disconfirming individuals, the unprejudiced person can revise her stereotypes and see herself as more inline with her egalitarian values. In one study, when given a choice to interact with an African American who seemed stereotypic or an African American who seemed non-stereotypic, participants who had low levels of racism were three times more likely than participants with high levels of racism to choose the non-stereotypic person (Wyer, 2004). This finding suggests that people who see themselves as unprejudiced are more likely to seek out individuals who disconfirm common stereotypes than those who do not see themselves as unprejudiced.

Research on the effect of challenging stereotypes also suggests that people who receive positive feedback from a stigmatized individual may also be motivated to process stereotype disconfirming characteristics of that person in effort to disregard his/her negatively valued status (Sinclair & Kunda, 1999; Wyer, 2004). Because positive feedback acts to bolster feelings of self worth, individuals may be motivated to process disconfirming information from people, such as doctors, who make them feel good about themselves so that the positive feedback maintains its value (Sinclair & Kunda, 1999).

As one reviews the multiple methods to reduce prejudice toward any group, one must consider the specifics of the stigmatizing attribute(s) of the group in question. As discussed by Goffman (1963) and others, stigmas vary in severity and nature and these characteristics may influence the success of various prejudice reduction techniques. In the next section I review literature on weight-based stigma. I further discuss techniques that facilitate reduction of weight-based prejudice. Following this review, I note the limitations of previously established methods for reducing negative attitudes towards this group and suggest that I-sharing serves as a potentially useful mechanism for reducing weight-based prejudice.

Weight-based prejudice

Prejudice against heavyweight individuals, those people who are perceived as overweight or obese, has been called one of the last socially accepted prejudices in the United States (Crandall, 1994; Falkener, French, Jeffery, Neumark-Sztainer, Sherwook, & Morton, 1999). Crandall (1994) suggested that weight-based prejudice stands out as an ideal candidate for the study of explicit prejudice because, unlike other forms of prejudice whose expression get suppressed in the present social climate of the United States, prejudice against the heavyweight remains common, acceptable, and highly negative. The explicit nature of weight-based prejudice serves as an indicator, according to Crandall (1994), of the highly stigmatized nature of attitudes toward the heavyweight.

Prejudice toward heavyweight people remains so ingrained in the United States culture that these attitudes emerge in Americans at a very young age. Research shows that, when utilizing social distance scales, white children as young as three years old identify overweight peers as their least liked peers (Cramer & Steinwert, 1998; Staffieri, 1967). These scales, which present images of children with varying social stigmas (including a child in a wheel chair, an African American child, and a heavyweight child), ask youngsters to order a group of potential friends from the children with whom they would most like to be friends to children with whom they would least like to be friends. Researchers found that children consistently ranked the heavyweight child last, indicating that by the preschool level children endorsed the severe social stigma of being heavyweight (Cramer & Steinwert, 1998; Staffieri, 1967).

The problems that heavyweight girls face as a result of their weight spill into their family lives during the teenage years. In a compelling study examining the pervasiveness of prejudice towards the heavyweight, Crandall (1991) demonstrated that the parents of heavyweight women attending college offered them less financial and academic assistance as compared to the parents of light/medium weight women. Crandall argued that this disparity not only influences the personal lives of these women, but also results in fewer heavyweight women in prestigious universities, leading to an under-representation of this group in positions that require high quality academic training (Crandall, 1991).

If the heavyweight encounter discrimination from their own family members, one can only imagine how pervasive discrimination against members of this social group must be and the detrimental effects of that discrimination for the heavyweight. Heavyweight individuals are less likely than their coworkers to hold managerial positions in the workplace (Puhl & Brownell, 2001). In most states anti-discrimination laws do not protect overweight and obese individuals, making dismissal from jobs because of being too heavy by standards outlined by an employer legal and common practice in fields such as aviation (Puhl & Brownell, 2001). Even physicians who specialize in fields related to weight-loss and obesity treatment endorse anti-fat attitudes (Schwartz, O'Neal Chambliss, Brownell, Blair, & Billington, 2003), making prejudice for heavyweight individuals a problem in the field of medicine.

Perhaps one of the more troubling aspects of heavyweight stigma, heavyweight individuals as a group seem to lack an in-group protective strategy (Crocker et al., 1998). Members of most stigmatized groups tend to adopt a positive in-group preference. This preference elevates members of the group above the out-group members who stigmatize them (Crocker & Major, 1989). Crocker and Major (1989) argued that this enables stigmatized individuals to protect their self-esteem by placing blame for their stigma outside the self. Because of this protective strategy, stigmatized individuals tend to not suffer self-esteem deficits, often times holding equally as positive views of the self as non-stigmatized individuals (Crocker & Major, 1989).

As shown in a meta-analysis conducted by Miller and Downey (1999), self-identification as heavyweight correlates negatively with self-esteem. Other markers of lowered well-being have been found in the heavyweight, including a positive relationship between weight and the incidence of clinical depression (Carpenter, Hasin, Allison, & Faith, 2000). These findings indicate that heavyweight individuals suffer from lowered well-being and do not utilize the in-group self-protective strategies that help other stigmatized individuals cope with their devalued identities and maintain positive self-esteem.

Crocker and colleagues (1998) provide a convincing argument that the visibility of weight and the perception of weight as a controllable factor contribute to heavyweight individuals' inability to utilize the in-group self-protective properties of stigma to cope with their stigmatized status. Because of the visibility of weight, heavyweight individuals cannot control when and how people discover their stigmatizing attribute and are therefore less able to utilize stigma concealment as a coping strategy (Crocker et al., 1998).

A study conducted by Miller, Rothblum, Felicio, and Brand (1995) that examined the role of visibility in coping with the stigma of heavyweight supports this suggestion. The authors arranged for heavyweight women to engage in phone conversations with other people and manipulated participants' visibility, as well as their beliefs about their visibility. Results of the study showed that when heavyweight women thought their partners could see them, they actively worked to compensate for their stigma through improved social skills. When they believed that they could not be seen, but in reality were visible, participants' social competency ratings decreased. These finding suggest that because heavyweight individuals have little control over how and when their stigma gets noticed, they may constantly utilize compensatory skills in interactions with others and therefore stigma chronically influences their social interactions.

Research indicates that the severity of the stigma may be in part due to the cultural belief that weight is controllable and being heavy represents a violation of the

Protestant Ethic values of the United States' society (Crandall & Biernat, 1990). The belief that hard work and determination lead to the accomplishment of any end goal, despite adversity, predicts attitudes towards the heavyweight (Crandall & Biernat, 1990; Crandall & Martinez, 1996; Quinn & Crocker, 1999). Quinn and Crocker (1999) demonstrated that belief in the Protestant Ethic mediated the relationship between self-identification as overweight and lowered psychological well-being. These findings suggest that viewing weight as a controllable characteristic relates not only to negative attitudes about the heavyweight, but also contributes to the psychological well-being for heavy individuals.

To summarize, heavyweight individuals face particularly pervasive and negative stigmatization (Crandall, 1994). Prejudice toward this group begins at an early age (Cramer & Steinwert, 1998; Staffieri, 1967) and continues through adulthood, influencing work, medical attention, and social relationships (see Puhl & Brownell, 2001, for review). Further, heavyweight people suffer from lowered well-being (Miller & Downey, 1999) and face obstacles when coping with their stigmatized status (Miller et al., 1995). Given the highly negative nature of this stigma and the rising rates of people who qualify as overweight and obese in the United States (Hedley et al., 2004) it becomes increasingly important to identify interventions for the reduction of this prejudice.

Reduction of weight-based prejudice

A multitude of research on prejudice reduction shows that cross-categorization, education, stereotype disconfirmation, and intergroup contact serve as effective methods for reducing negative attitudes toward stigmatized individuals. Surprisingly, a review of literature on weight-based prejudice revealed only a small number of studies investigating interventions for the prejudice faced by heavyweight individuals; I will now briefly review those studies.

One method to challenge weight-based prejudice, used by two separate research teams, utilized the education method of prejudice reduction. The first of the two studies focused on educating a group of medical students about the role that genetic predisposition plays in obesity through reading, discussing, and role-playing (Wiese et al., 1992). Encouragingly, participants in the study showed a reduction in their negative attitudes towards heavyweight people. A one year follow-up with participants indicated continued reduction in negative attitudes towards the heavyweight. Although researchers reduced the medical students' prejudicial attitudes, the authors emphasized the limited applicability of the study results to the general public because the study focused on attitudes in medical students (Wiese et al., 1992). The authors argued that medical students receive extensive training on how to apply and remember information in an education setting and therefore may particularly benefit from an education intervention.

Robinson, Bacon, and O'Reilly (1993) conducted a similar study that attempted to reduce weight-based prejudice in a group of heavyweight women by educating them about genetic causes of weight. Research suggests that genetic factors largely determine weight-status and people face difficulty when attempting to lose weight (Bell, Walley, & Froguel, 2005; Lyon & Hirschhorn, 2005). The study resulted in reduced negative attitudes in a portion of their participants, with 24 of the 40 participants in the study showing some improvement in their "fat phobia" scores. However, the authors cautioned that their study may not be a realistic intervention for weight based-prejudice because it also involved extensive self-esteem counseling in effort to reduce participants' feelings of guilt about their weight status. The combined treatment rendered the authors unable to determine what aspect created the reduction in fat phobia scores and therefore they lacked the ability to make recommendations for reductions in a general sample.

Further, neither study utilizing education as an antidote for weight based prejudice ruled out the possibility that demand characteristics may have driven their effects. Specifically, given the explicit nature of the interventions, participants may have been aware of the goals of the study and therefore indicated lower levels of prejudice toward heavyweight people for that reason. This seems rather likely when considering the medical students utilized by Weise and colleagues (1992). Although the authors discussed the notion that their participants likely retained the information presented in the study and revised their prejudicial attitudes because of their training as students, it also seems possible that simply being scientists and medical professionals increased their awareness of the study goals and their subsequent responses without necessarily producing long-term effects.

Although research suggests that removing a stigmatizing attribute facilitates prejudice reduction (Crocker et al., 1998), findings appear to support the idea that when a heavyweight person loses weight it results in *increased* anti-fat attitudes from others (Blaine, DiBlasi, & Connor, 2002). Blaine and colleagues (2002) examined the role of weight loss in attitudes towards heavyweight women in a sample of 62 women. After reading descriptions of heavyweight women who had either recently lost weight or maintained their overweight status, all participants showed more dislike and disgust for women who recently *lost* weight than those who maintained their weight status. Also, overall, participants expressed more prejudice toward women who lost weight. The authors suggested that the belief of weight as controllable explains these findings. Participants labeled women who lost weight more negatively perhaps because they blamed them for their own prior stigmatization (Blaine et al., 2002).

A literature review identified two studies that successfully reduced prejudice toward heavyweight individuals. Both studies utilized education of the genetic factors that contribute to being heavyweight as a tool for creating a reduction in prejudicial attitudes (Wiese et al., 1992; Robinson et al., 1993). Although these studies are encouraging, the authors' focus on specialized populations of medical students and heavyweight females serves as one major limitation of previous work. Further, the researchers failed to rule out demand characteristics, and these influences potentially explain the findings.

Weight-based stigma remains highly severe and previous research provides little direction for reduction of these negative attitudes. Consideration of the methods commonly used to reduce prejudice highlights difficulties posed by this specific type of prejudice. Research on cross-categorization, for example, suggests that adopting multiple identities represents one way to reduce intergroup bias. Adopting heavyweight status to reduce one's prejudice clearly does not represent a useful strategy. Further, successful research examining education as antidote for weight-based prejudice lacks evidence of utility in a normative sample. Based upon the decades of research on prejudice interventions, facilitating meaningful contact between heavyweight individuals and light/medium weight individuals seems promising given the rising rates of overweight and obese individuals in the United States. However, the highly visible nature of weight and the negative stereotypes associated with the group remain major obstacles to creating contact and fostering closeness with members of this group. Successful intergroup contact with heavyweight individuals could utilize a mechanism that fosters feelings of closeness that is not based upon the highly negative beliefs and characteristics associated with weight; I-sharing provides a pathway for creating this type of closeness.

I-sharing in intergroup relationships

On a basic level, Pinel and colleagues (2006) demonstrated I-sharing's power to increase liking for non Me-sharers, or those with objective characteristics that differ from one's own. Considering the importance of groups and the power of stigmatization in our society, these researchers extended their investigation to intergroup relations. In a series of five experiments, Pinel and Long (under revision) explored whether assumptions about I-sharing mediated the relationship between group membership and liking for in-group members. They also examined the consequences of I-sharing with an out-group member and studied the role that I-sharing plays in prejudice reduction. Pinel and Long (under revision) argued that I-sharing plays a unique role in inter-group relations because it stresses subjective similarity while allowing basic objective differences, such as color of skin, to remain salient.

The initial studies in the package focused on two questions: Do people assume that they I-share with in-group members? Does that assumption mediate the relationship between group membership and in-group preference? The first study approached these questions by examining socially significant groups, heterosexual and homosexual men. Specifically, the authors asked whether heterosexual men assumed they would I-share with other heterosexual men and not homosexual men, and if that assumption could account for the relationship between group membership and levels of homophobia in participants. Utilizing a survey methodology, the researchers presented participants in the study with one of two male individuals, equated on a number of demographic characteristics with the only major difference being that for some participants he identified as heterosexual and for others he identified as homosexual. Participants then rated their level of objective and subjective similarity to the target, as well as how much they liked him. The researchers also measured participants' levels of homophobia. Results indicated that participants who interacted with the heterosexual partner rated themselves as more subjectively similar to him than participants who interacted with the homosexual partner. Further, perceived subjective similarity accounted for participants' liking for their partner and their levels of homophobia.

The next study examined whether assumptions about I-sharing account for in-group preference in a traditional minimal groups paradigm. As discussed previously, a minimal groups paradigm represents a classic way to examine group relations in social psychology. In the typical set-up, participants are grouped randomly based upon some arbitrary similarity that does not correspond to an existing social group; for this study, the researchers used preference for artists. Pinel and Long (under revision) led participants to believe that preference for one of two artists represented a meaningful characteristic, and that all individuals who liked particular artists tended to have similar traits. Participants favored their own group the most when they believed that they I-shared with other people who shared their preference of artists.

The remaining three studies conducted by Pinel and Long (under revision), directly examined what happened when participants in their studies I-shared with an out-group member, and not an in-group member. The authors created a computer program that provided participants with false feedback from two interactions partners. This program led participants to believe that one of the partners consistently answered questions during a game in the same manner as them. By utilizing a game, Pinel and Long simulated shared subjective experiences. In this paradigm, I-sharing occurred when participants' partners provided answers to the game that matched the participants' own responses. In both studies, Pinel and Long (under revision) found that participants preferred I-sharers to non-I-sharers, regardless of their stigmatized status and the level of prejudice that participants held prior to the interaction. One study examined I-sharing between individuals of different sexes, another study examined I-sharing between individuals of different sexual orientations, and the final study asked the same question looking at individuals of different racial backgrounds, specifically White participants who I-shared with African American participants.

In each study, researchers lead participants to believe that they interacted with two other people through a computer game, one objectively similar partner (i.e. sex, sexual orientation, or race) and one objectively different partner. By manipulating with whom participants believed they I-shared, Pinel and Long (under revision) demonstrated that individuals consistently liked the I-sharing partner more than the non-I-sharing partner, regardless of objective differences.

Perhaps most importantly for the current research study, the final study examined whether participants' levels of Symbolic Racism (Henry & Sears, 2002) changed based upon their I-sharing partner. All participants completed a pre-interaction measure of racism and then engaged in a game with two partners, one who identified as African American and one who identified as White. Post interaction measures of racism indicated that 63% of participants who I-shared with the African American partner had a reduction in levels of racism, while 61% of participants who I-shared with the White partner showed an increase in levels of racism.

A separate study examining African American's judgments of warmth and competence of both an African American (in-group member) and an European American (out-group member) interaction partner provides further support for I-sharing's effectiveness to increases positive attitudes towards out-group members (Pinel, Long, & Crimin, under review). Research on intergroup attitudes suggests that judgments of warmth and competence underlie most, if not all, social stereotypes (Fiske, Cuddy, Glick, & Xu, 2002). In this framework, social stereotypes dictate that African Americans are judged relatively midrange on both warmth and competence, with classic research actually suggesting stereotypes with higher ratings of warmth than competence (Allport, 1954). In contrast, European Americans are judged as competent but not particularly warm (Fiske et al., 2002). Pinel and colleagues (under review) wondered what influence I-sharing experiences would have on African American participants' judgments of warmth and competence of African Americans and European Americans as a whole.

Pinel and colleagues exposed participants to both an in-group member (i.e. an African American) and an out-group member (i.e. an European American) and manipulated with whom they I-shared. Results showed that I-sharing increased positive attitudes toward the I-sharing partner's group on the domain in which the group typically fairs well. Specifically, I-sharing with an African American (i.e. an in-group member) resulted in higher judgments of warmth for African Americans and no differences in judgments of competence for African Americans and European Americans. Conversely, participants who I-shared with an European American (i.e. an out-group member) judged European Americans as significantly more competent than African Americans, but similar to African Americans on the trait of warmth. Essentially, I-sharing experiences seemed to increase positive attitudes toward out-group members (as well as in-group members), such that the strengths of the group were magnified and the weaknesses were minimized. In the case of European Americans, the out-group, participants judged the group as more competent when they I-shared with an European American than when participants I-shared with an in-group member, showing magnification of the relative strengths of European Americans. Similarly warmth ratings of African Americans and European Americans did not differ, perhaps minimizing the groups' weaknesses (i.e. participants who did not I-share with a European American rated European Americans as less warm than African Americans).

The work conducted by Pinel and colleagues (Pinel et al., 2004; Pinel et al., 2006; Pinel & Long, under revision; Pinel, Long, & Crimin, under review) suggests that I-sharing is an ideal candidate for reducing prejudice toward stigmatized groups because I-sharing experiences seem to foster positive attitudes toward out-group members. By initiating subjective experiences and creating interpersonal connectedness between groups, interventions for prejudice that utilize subjective connectedness as a pathway for establishing commonality can be created.

It should be noted that I-sharing interventions for prejudice differ from previous work perhaps because establishing subjective connectedness allows objective differences to remain intact while still fostering shared experiences. In fact, Pinel and Long (under revision) showed through reaction time data that, following an I-sharing interaction, participants more quickly identified the race of their partners (the stigmatized attribute) than the name of the partner with whom they I-shared. This finding provides some support for the idea that while *subjective* connectedness occurred, *objective stigmatized characteristics* remained salient.

The intergroup I-sharing studies outlined above (Pinel & Long, under revision; Pinel, et al., under revision) examined relationships with out-group members, some targets of stigma (e.g. African Americans, women, homosexuals) and some majority group members (e.g. men, European Americans). Given that the authors successfully increased positive attitudes, and in some cases decreased negative attitudes, toward objectively different out-group members it seems that I-sharing provides a pathway for fostering positive intergroup relations that may overcome the objective characteristic of stigmatized status.

Given the lack of published research studies that demonstrate prejudice reduction toward members of this highly stigmatized group, Crimin and Pinel (2008) sought to test the power of I-sharing to foster positive feelings toward objectively dissimilar others in the context of relationships with heavyweight individuals. Specifically, the authors wanted to test whether I-sharing with a heavyweight woman would increase liking for her and decrease negative attitudes toward her group. To test this goal, participants in a study on "online communication," played a computer game with both a heavyweight woman and a lightweight woman. The researchers randomly assigned participants to either I-share with the heavyweight partner (and not I-share with the lightweight partner) or to I-share with the lightweight partner (and not I-share with the heavyweight partner). Participants' levels of liking for their interaction partners (computer generated confederates) were assessed. In addition to the liking measure, the authors also measured prejudice toward heavyweight people prior to and following the I-sharing manipulation.

The results of this study, consistent with past I-sharing research, showed that participants indicated liking the partner with whom they I-shared significantly more than their non I-sharing partner, regardless of the I-sharing partner's weight status. Although the authors did not find the predicted relation between I-sharing and prejudice toward heavyweight people, I-sharing condition related to liking for the heavyweight partner (r=.480, p<.001) and liking for the heavyweight partner subsequently related to prejudice toward heavyweight people (r=.419, p<.002). These associations show an indirect effect of I-sharing on prejudice toward heavyweight people, suggesting that I-sharing may have an influence on prejudice toward members of this group that was not tapped into in this study.

Taking together the strategies that research shows lead to reduction of prejudice (i.e. education, cross-categorization, intergroup contact, and stereotype disconfirmation), the lack of studies demonstrating prejudice reduction toward heavyweight individuals, and the findings suggesting that I-sharing increases liking for heavyweight interaction partners (Crimin & Pinel, 2008), a number of questions surface. The first point of interest centers on the role of stereotypes and stereotype disconfirmation in Crimin and Pinel's (2008) findings. According to the literature on stereotype disconfirming exemplars, interacting with someone who disconfirms stereotypes about a particular group may lead to revision of stereotypes about the group and lower levels of prejudice (Wyer, 2004). Given that Crimin and Pinel (2008) did not provide participants with any information about their interaction partners beyond simple demographic characteristics, participants' inferences about their interaction partner's stereotype relevant objective characteristics possibly varried. By not providing participants with information about the stereotype consistency (or lack thereof) of their partner's characteristics, the researchers left open the possibility that participants assumed that their I-sharing partner possessed stereotype disconfirming objective characteristics. Given that I-sharing fosters closeness and feelings of belief validation and the stigma of weight labels a person with a discredited identity, it seems plausible that participants interacting with a stigmatized individual may have looked for ways to discount their I-sharing partner's stigmatized status as a mechanism to validate the positive I-sharing experience and its effects. Given that the United States culture highly devalues heavyweight, the benefits to the self that result from I-sharing may be labeled as not valid or meaningful based upon the partner's stigmatized status. Consistent with the stereotype disconfirmation literature, interpreting the partner's objective characteristics as stereotype disconfirming would serve as a way to reevaluate or dismiss the significance of one's stigma (Sinclair & Kunda, 1999).

Following this logic, if participants interpreted their interaction partner as a stereotype disconfirming exemplar when they I-shared, stereotype disconfirmation and/or the interaction of stereotype disconfirmation and I-sharing may explain resulting high levels of liking for the heavyweight I-sharing partner. For the purpose of future research and understanding the utility of I-sharing to increase positive attitudes toward stigmatized others, it becomes crucial to know whether the stereotypicality of a partner's objective characteristics moderate I-sharing's effect on liking. The current study addressed this issue by manipulating the stereotypicality (i.e. the extent to which an individual confirms stereotypes about her group) of a heavyweight interaction partner.

Further, this suggestion raises a question about the role that stereotype confirming information may play in the process of I-sharing with a stigmatized individual. Specifically, how do participants react to I-sharing with a partner whose objective characteristics confirm, or are in line, with the negative stereotypes about her group? Given that I-sharing experiences foster closeness and belief validation, participants may not want to feel close and similar to someone with a highly negative social identity.

Stated simply, I-sharing with a disliked other may be a negative experience because of the closeness that it fosters.

In addition, characteristics of the participant may influence how negative the I-sharing experience seems. For example, for some people the process of I-sharing with a heavyweight woman may be inherently threatening or bad because of some individual difference characteristic, such as a high fear of becoming heavyweight oneself, because of the closeness and feelings of similarity that result from I-sharing. For the individual who fears becoming heavyweight herself, the closeness and subjective similarity of I-sharing may be threatening because of the implicit message that she is like the heavyweight woman and may feel more vulnerable to acquiring heavyweight herself. Research from the psychological distancing literature sheds some light on this suggestion.

Psychological distancing from undesirable I-sharers

Although Baumeister and Leary (1995) suggest that people possess a fundamental need to belong to groups and Pinel and colleagues (Pinel et al., 2004; Pinel et al., 2006; Pinel & Long, under revision) argue that the feelings of connectedness that result from I-sharing help to relieve feelings of existential isolation, research on psychological distancing suggests that, in some instances, feeling too close to another person can be threatening. Schimel and colleagues (Schimel, Pyszczynski, Greenberg, O'Mahen, & Arndt, 2000) argue that viewing oneself as similar to a person with a feared negatively valued characteristic, such as violent aggression, results in psychological distancing. This distancing acts as a defense mechanism to make the self appear as dissimilar to the person with the feared characteristics as possible (Pyszczynski, Greenberg, Solomon, Sideris, & Stubing, 1993; Schimel et al., 2000). The rationale behind this concept stems from psychoanalytical theory that states that each person has a "shadow" that represents the feared self, the self that possesses negative characteristics (Jung, 1951/1959). People act to avoid expressing that "shadow" and therefore distance themselves from people who seem too much like the feared self because similarity with such people is threatening (Schimel et al., 2000).

Uniqueness Theory (Fromkin, 1970; Snyder & Fromkin, 1977) also provides support for the idea that seeing oneself as too similar to a deviant individual may result in distancing and negative affective experiences. Fromkin (1970; Snyder & Fromkin, 1977) argued that all people possess a need to feel unique and feeling too similar to a person with a negative characteristics, in particular, violates that need. In one study, the experimenter gave participants false feedback on a personality test that indicated similarity to another person in the study whose test scores possessed an abnormal characteristic (Fromkin, 1970). After receiving the feedback, participants in this study indicated high levels of negative affect. Then, when given the choice to participate in an activity, participants who received the false feedback more often choose the option not available to other people in the study and therefore avoided further similarity. Fromkin (1970) argued that this choice distanced participants from the abnormal person and therefore fulfill their need for uniqueness.

Given that Pinel and colleagues (Pinel et al., 2004; Pinel et al., 2006; Pinel & Long, under revision; Pinel, Long, & Crimin, under review) have shown that I-sharing fosters feelings of interpersonal connectedness, research on psychological distancing

(Pyszczynski et al., 1993; Schimel et al., 2000) and Uniqueness Theory (Fromkin, 1970; Snyder & Fromkin, 1977) suggests that an I-sharing experience with an individual who possesses negative characteristics may actually be negative, particularly for those who fear that negative characteristic in themselves.

Unlike inborn stigmatizing attributes, such as minority racial/ethnic group membership, many people consider heavyweight a stigma that people acquire. Heavyweight people face blame for their weight status, and the stigma of heavyweight in the United Status remains severely negative (Crandall, 1994). The current study investigates the claim that for an individual who has a fear of becoming heavyweight themselves, I-sharing with a heavyweight person whose objective characteristics confirm stereotypes about heavyweight people may be an extremely negative experience that results in psychological distancing. A person whose objective characteristics confirm stereotype characteristics embodies all of the negativity associated with heavyweight individuals in the United States, essentially reminding the individual why he/she fears attaining the heavyweight identity. I-sharing experiences and the closeness associated with her may signal to high fear of heavyweight individuals that they are similar, or like, someone who embodies their fears.

To defend oneself from feeling similar and close to a heavyweight individual, participants who fear becoming heavyweight may psychologically distances themselves from their I-sharing partners. Although still not an overly positive experience because of one's interaction partner's stigmatized status, I-sharing with a heavyweight person who confirms stereotypes about heavyweight people when one does not personally fear becoming fat may be less negative because it poses less of a threat to the individual.

Rationale for the current study

There were three main questions of interest in the current study. First, extending upon Pinel and Long's (under revision) findings, can an I-sharing experience foster increased liking and decreased prejudice for heavyweight individuals? Second, what role does stereotype relevant objective information (i.e. characteristics of the Me) play in the process of attitude formation following an I-sharing experience with a heavyweight partner? A final exploratory question examined psychological distancing after I-sharing with a heavyweight individual and the role of one's own fear of becoming heavyweight in the distancing process.

Using I-sharing as a means to establish connectedness between members of different social groups combines decades of research on prejudice reduction with James' (1890/1918) conception of the subjective self. Previous research suggests that creating commonality amongst members of different groups effectively decreases levels of prejudice (Sherif et al., 1954). Furthermore, intergroup contact remains one of the most widely studied prejudice reduction strategies and argues that establishing contact between groups also reduces prejudice (Allport, 1954).

Although these interventions traditionally focus on goals and connections on the objective level, such as identifying common characteristics, like a favorite musical group, James' distinction between the "Me" (the objective self) and the "I" (the subjective self) provides another potential pathway for intervention. Recently, Pinel and Long (under revision) found that shared subjective experiences resulted in reduction in prejudice toward members of a racial outgroup. By fostering shared subjective experiences, Pinel and Long (under revision) showed that the contact hypothesis (Allport, 1954) for prejudice reduction applies to the "I."

Previous studies that successfully reduced weight-based prejudice, focused on the education as an antidote method (Wiese et al., 1992; Robinson et al., 1993). Although promising, other methods for the reduction of prejudice towards heavyweight people need to be developed to alleviate some of the burden felt by the growing number of people who are heavyweight (Klaczynski, Goold, & Mudry, 2004). Research suggests that I-sharing experiences form interpersonal connectedness not based upon objective characteristics (Pinel et al., 2006; Pinel & Long, under revision). As shown in a recent study conducted by Crimin and Pinel (2008), I-sharing serves a potential mechanism for reducing the negative attitudes expressed toward heavyweight individuals by fostering interpersonal contact on the subjective level. However, the role that differing types of objective information play during an I-sharing interaction has not yet been examined and the current study fulfills that need.

To extend I-sharing research, this study examined the role that stereotype relevant objective characteristics play in the process of I-sharing with a stigmatized individual. Research on stereotypes suggests that people readily seek out stereotype disconfirming information from out-group members as a method of self-enhancement upon receiving positive feedback from a stigmatized individual (Sinclair & Kunda, 1999; Ybarra et al., 2003). Also, psychological distancing (Pyszczynskiet al., 1993; Schimel et al., 2000) and

Uniqueness Theory (Fromkin, 1970; Synder & Fromkin, 1977) suggest that feeling too similar to a person that possesses an attribute that one fears in oneself can increase negative feelings towards that person and result in psychological distancing. Given the important role that stereotypes play in intergroup relations and the continued societal focus on weight loss in the United States, stereotype relevant objective information plays a crucial role in determining the usefulness of I-sharing for reducing negative attitudes held towards heavyweight individuals.

To further disentangle the role of stereotype disconfirmation and I-sharing in reducing negative attitudes towards heavyweight individuals, participants in this study received both objective (Me) information and subjective (I) information about an interaction partner. I manipulated the subjective and objective information to determine the role that each type of information plays in intergroup relations.

First, participants learned about the objective characteristics of a heavyweight woman with whom they interacted. Some participants received information about their partner's objective characteristics that *disconfirmed* stereotypes about heavyweight people, and some people received information that *confirmed* those same stereotypes. After participants received information about the objective characteristics of their interaction partners, they experienced an interaction that tapped into the subjective self. This interaction served as the I-sharing manipulation. Some of the participants shared subjective experiences (*I-sharing*) with their partner, some experienced an interaction of the subjective self but did not share their subjective experiences with their partner (*no I-*

sharing), and some participants did not experience an interaction of the subjective self (*control*).

Finally, consistent with literature on psychological distancing (Pzyczynski et al., 2000), this study examined the role of fear of becoming heavyweight in I-sharing experiences with members of this social group. A pre-test measured participant's fear of becoming heavyweight prior to the interaction. Hypotheses predicted that this measure would be particularly important when participants I-shared with a heavyweight partner whose objective characteristics confirmed stereotypes about heavyweight people, because I-sharing creates closeness that may be threatening to an individual who fears becoming heavyweight.

Hypothesis 1

Consistent with and extending upon previous research on I-sharing, participants who experience an I-sharing interaction with a heavyweight partner will show more liking for the heavyweight partner and lower levels of prejudice towards her group after the interaction as compared to those participants who experienced a subjective interaction with a heavyweight but do not I-share with her and those who do not have a subjective interaction with a heavyweight partner.

Hypothesis 2

Based upon research on stereotype disconfirmation, participants who interact with a partner whose stereotype relevant objective characteristics disconfirm stereotypes about heavyweight people will indicate more liking for their partner and lower levels of prejudice towards heavyweight people in general as compared to those whose partners' stereotype relevant objective information confirms stereotypes about heavyweight people.

Hypothesis 3

The current study addressed limitations of previous I-sharing studies by providing participants with stereotype relevant objective characteristics of their interaction partner. A significant interaction between I-sharing and stereotype disconfirmation such that the effect of I-sharing will depend on the stereotypicality of the partner was predicted. Specifically it was predicted that within the I-sharing condition, participants assigned to the I-share/stereotype confirmation condition (as compared to the I-share/disconfirm condition) will like their partner *less*, show *more* prejudice towards heavyweight people, and show *more* psychological distancing from her.

Hypothesis 3b

Given the literature on psychological distancing, hypothesis three may be qualified by participants' own fear of becoming heavyweight. For participants who fear being heavyweight, I-sharing with a heavyweight partner who confirmed stereotypes may foster *less* liking, *more* distancing from the partner, and *more* prejudice towards heavyweight people than participants who are low in fear of becoming heavyweight.

Method

Participants

One hundred and thirty-nine undergraduates recruited through psychology courses at the University of Vermont participated in this study in exchange for extra credit or course credit. Participants ranged in age from 18-25, with a mean age of 19.65

years old. The racial backgrounds of participants were as follows: 118 (90.8%) White/Caucasian, 5 (3.8%) Asian, 1 (.8%) Black/African American, 2 (1.5%) Multiracial, 2 (1.5%) other, and 2 (1.5%) participants did not provide race data. Of the 130 participants in this study, 4 (3.1%) identified as Hispanic. Eighty-nine (68.5%) participants identified as female, 39 (30%) identified as male, and 1 (.8%) individual identified as Other. There were no a priori predictions based upon gender of participants and no gender differences emerged when testing the hypotheses for this study. Gender and racial/ethnic identity of participants will not be discussed further. All participants self-identified on a screening survey as light/medium weight (33.1% lightweight; 66.2% medium weight) and had a Body Mass Index (BMI) of 27.0 or less, computed from self-reported height and weight.

I excluded one participant from analyses because of failure to recall the weight status of his/her interaction partner. Eight other participants failed the manipulation check for the stereotypicality manipulation and were therefore excluded from analyses. The final sample size used for data analysis was 130. Participants were randomly assigned to one of six conditions, resulting in 18 to 23 participants in each condition. Based upon past studies conducted by Pinel and colleagues (Crimin & Pinel, 2007; Pinel et al., 2006; Pinel & Long, under revision), twenty participants were needed in each of the six conditions to yield sufficient power to achieve moderate effect sizes of I-sharing.

Overview of Procedures

Individuals in this study participated on two separate occasions. The first phase of the study required participants to complete a series of questionnaires administered through an online survey research website. Self-reported weight-status, fear of becoming heavyweight, and weight-based prejudice represented the measures of interest. The second phase of the study occurred within 30 days of the online survey in the laboratory and consisted of a computer interaction that simulated I-sharing. After the computer interaction, participants completed a follow-up survey to the preliminary online survey, allowing for a measurement of weight-based prejudice after the I-sharing interaction.

Phase 1: preliminary survey

A preliminary survey, conducted online through the survey administration website SurveyMonkey.com, screened for participants who self identified as light/medium weight. Participants read an information sheet outlining the general goals of the study and received contact information for the research team in order to ask questions before beginning the study. This survey obtained a premanipulation measure of participants' fear of becoming heavyweight, as measured by the Goldfarb Fear of Fat Scale (Goldfarb, Dykens & Gerrard, 1985), a baseline measure of participants' weight-based prejudice, as measured by the Anti-Fat Attitudes Test (Lewis, Cash, Jacobi, & Bubb-Lewis, 1997), a Feeling Thermometer for fat people, and a Semantic Differential for fat people (adapted from Sassenberg, Moskowitz, Jacoby, & Hensen, 2006).

Self-reported weight-status

The demographic portion of the survey included the target questions about participants' weight statuses. Participants reported their height and weight. Despite the popular notion that people, particularly women, under report their own weight, past research supports the use of self-reported weight for empirical studies. Self-reported weight has been considered so reliable and accurate, that some researchers have utilized self-reported weight in epidemiological studies (Carpenter et al., 2000). Brownell (1982), a leading scholar in the field of obesity studies, argued that self-reported weight, while not substantially accurate for treatment studies, is sufficient in empirical studies examining the effects of weight on individuals' lives. Further, given that this study aimed to identify those individuals who did not identify as heavyweight for participation, self-reported weight-status best represented the group membership of interest.

A Body Mass Index (BMI) score was computed from this information as part of the inclusion criteria for the study. BMI is a person's weight (in kilograms) divided by his/her height squared (in meters). BMI scores highly correlate with weight but not height and researchers often utilize BMI as a medical calculation to determine weight status (Stunkard & Albaum, 1981). According to CDC standards, a BMI of 27.0 corresponds with a medically moderately overweight person (CDC, 2006). Initially, I only invited individuals with BMI scores 25.0 or less (scores higher than 25.0 but less than 27.0 signify individuals that are moderately overweight) to participate in the study. It became apparent after an initial period of recruitment that changing the BMI inclusion criteria to 27.0 or less would increase the participant pool substantially. Thus, participants with a self-reported BMI of 27.0 or less and who self-identified as light/medium weight were invited to participate in this study. The current sample consists of 110 participants with BMI of 25.0 or below, 20 participants with BMI of 25.1-27.0. The goal of prescreening for weight status was to include only participants that identified heavyweight individuals as members of a different social group, by ensuring that participants self-identified as light or medium weight I feel that I obtained this goal despite increasing the BMI to allow moderately medically overweight individuals to participate in the study.

The Goldfarb Fear of Fat Scale (Goldfarb et al., 1985, α=.85, See Appendix A)

The Goldfarb Fear of Fat Scale (Goldfarb et al., 1985) measures the degree to which people fear becoming heavyweight. This measure is a 10 item questionnaire that yielded high test-retest reliability (r=.88) in past research and demonstrated internal consistency in the current study (Pre-manipulation α=.89; Post-manipulation α=.88). The test-retest reliability of this measure ensured that the initial pre-test served as a valid indicator of participants' fear of becoming heavyweight at the time of the laboratory portion of the study. The Goldfarb Fear of Fat Scale differentiates between people who are bulimic, repeat dieters, and non-dieters, which proved particularly helpful for this study because hypothesis three b focuses on individuals who fear becoming heavyweight. This fear may manifest in repeat dieting or more severe dieting behaviors.

The Anti-fat Attitudes Test (Lewis, Cash, Jacobi, & Bubb-Lewis, 1997; α=.95; see Appendix A, AFAT)

The Anti-fat Attitudes Test is a measure of prejudicial attitudes towards heavyweight individuals widely used throughout literature examining the consequences of weight for those commonly termed "fat." This 47-item scale assesses participants' prejudice against heavyweight individuals. This measure asks participants to rate statements about heavyweight people on a five point scale (1=strongly disagree; 5=strongly agree) and yielded high internal consistency in this study (Pre-test α=.96; Post-test α=.96). There are three subscales to the AFAT: Social/Character

Disparagement (15 items), Physical/Romantic Unattractiveness (10 items), and Weight Control/Blame (9 items). Given that the hypotheses of this study were not relevant to the subscales, the entire 47-item measure was used as an indicator of weight-based prejudice.

Past research on I-sharing conducted by Long and Pinel provided preliminary evidence that I-sharing may have the most impact on experientially based measures that are more congruent with the I, or subjective, self, rather than measures that rely on rational thought and personal reflection. Epstein's (2003) work on rational and experiential systems of the self inspired this distinction between cognitive and experiential outcome measures. According to Epstein, one's cognitive resources are composed of two separate but related systems, the rational and the experiential. The rational system relies upon past experiences, logic, and rules of order. In contrast, the experiential system engages in rapid, automatic processing, largely influenced by affect. The questions on the AFAT require participants to make judgments about heavyweight individuals based upon past and future experiences, as well as social and moral standards, characterizing the AFAT as a measure that relies on rational thought according to Epstein's distinction. For this reason, in addition to the AFAT, this study included two additional measures of prejudice theorized to capture more gut-level, emotional prejudice responses: The Feeling Thermometer and Semantic Differential. I chose the Feeling Thermometer and Semantic Differential in effort to tap into the experiential mindset theorized by Pinel and Long to be most influenced by I-sharing experiences.

Feeling Thermometer for fat people

A feeling thermometer is a measure used that asks participants to rate feelings of warmth towards individuals or members of certain group on a 0-100 degree scale. The version used in this study read as follows: Please rate how you feel towards the groups listed below. Rate your feelings as if you are using a thermometer of feelings from 0 to 100 degrees, with 100 degrees being the most positive as possible. Fill in next to each group name a degree, please use only whole numbers. The target group of interest from this list was "fat people." To disguise the group of interest in this study, the prescreening also asked participants to rate the following groups: men, women, feminists, psychologists, and African Americans.

Semantic Differential for fat people

Semantic differential tasks are also common in social psychology as measures of prejudice. This task asks participants to consider an individual or group of people and rate that entity on a series of continua, represented at each end by polar opposite descriptors. Participants in this study rated fat people on five 7-point continuums: bad/good, negative/positive, useless/valuable, unpleasant/pleasant, and awful/nice. Participants also rated men, women, feminists, psychologists, and African Americans on the same five differentials.

Additional measures

In addition to self-reported weight status, The Goldfarb Fear of Fat Scale (Goldfarb et al., 1985) and the Anti-Fat Attitudes Test (Lewis et al., 1997), the preliminary survey included ten filler measures to disguise the true nature of the survey from potential participants. The survey included the following additional measures (see

Appendix B): The Humanitiarism- Egalitarianism Scale (Katz & Hass, 1988, α=.84), The Existential Isolation Questionnaire (Long & Pinel, 2006, α=.80), Leary's Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2005, α=.80), Modern Racism (McConahay, 1986 α=.85), Modern Sexism (Swim, Aikin, Hall, & Hunter, 1995, α=.75), Positive and Negative Affect Scale (Watson, Clark, & Tellegen, 1988, PAS α=.84, NAS α=.85), Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960, α=.75).

At the end of the online survey, participants indicated level of interest in participating in a separate research opportunity being conducted by the same research lab. Those individuals who met the eligibility criteria (light/medium weight self identification, BMI less than 27.0, at least 18 years old, and completion of the Fear of Fat Scale and the weight based prejudice measures) and showed interest in participating in another study at the University of Vermont, received email invitations for a 45 minute study conducted in the laboratory.

Phase 2: the laboratory phase

I advertised the laboratory portion of the study under the title "Interacting Online." Students learned that the study involved an online communication exercise with another student participant. In actuality, students participated individually in a simulated interaction with a computer generated partner. Because this project examined in-the-moment shared experiences, it was necessary to lead participants to believe that they interacted with another student and not a computer generated partner. The online computer simulation provided a means for minimizing individual variation and error that would be present in a face-to-face interaction between two participants or a participant and a confederate. In the past, Pinel and colleagues successfully utilized similar computer programs to manipulate I-sharing (Crimin & Pinel, 2008; Pinel et al., 2006; Pinel & Long, under revision). A computer environment is likely familiar and comfortable for students and in the current study and previous studies this manipulation raised little suspicion and has not resulted in adverse effects for individuals in the studies. In the current study, all analyses were conducted controlling for participants' level of suspicion, rated on a 0 to 5 point scale (where 0 represented no suspicion and 5 represented extreme suspicion) by the experimenter after each session following a suspicion probe. The findings from these analyses did not differ from those reported in the results section.

Upon arrival at the lab, an experimenter greeted participants and led them into a room with a computer and a desk. When participants settled into the desk, the experimenter explained that the impressions that people gather from online communication interactions interested the research team. The experimenter indicated that there was another student in the study in a separate room that they would interact with throughout the study by answering a series of questions and sharing those answers with the other participant through the building's computer network. Participants then read and signed a consent form that indicated the interest and goals of the study and had the opportunity to ask questions about the study. Following this brief introduction to the study, the experimenter left the room to allow the participant privacy during the remainder of the study.

Introductions and stereotypicality manipulation.

The first section of the computer simulation, entitled the "getting to know your interaction partner" section, presented participants with information about their interaction partner. During this portion of the simulation, participants answered twenty-two questions about their objective (Me) characteristics (see Appendix D). Not only did this portion of the study allow the participants to gain basic demographic information about their interaction partner, it also served as the vehicle for the stereotypicality manipulation.

First, participants provided a nickname to be identified by throughout the study. They then provided their gender, age, eye color, hair length, hair color, and race/ethnicity. Next, participants supplied information about their body types. Specifically, participants entered their weight and height, indicated their weight status as lightweight, medium weight, or heavyweight, and chose a pictorial body figure from a figure rating scale that best represented their body size. The body figures used in this study were taken from the Body Figure Rating Scale (Fallon & Rozin, 1985; see Appendix C), a scale of nine standardized body figures representing a range from severely underweight to severely obese. These figures are commonly used to assess eating disorders and disturbances in body image, and therefore represent a wide range of body sizes. Finally, participants were asked whether they were currently on a diet.

Participants then provided information about topics that are relevant to the stereotypes about heavyweight people. First, to address the stereotype that heavyweight people are low-achieving, participants provided their academic major and desired job after leaving college. Next, participants answered food related questions, indicating their favorite food and the main dish that they ate for dinner the previous night, touching on the stereotype that heavyweight people are gluttonous and have bad eating habits. Participants were then asked how many hours per week they exercise and the activity that they typically do for exercise. These questions provided information about the stereotypes that heavyweight people are inactive and lazy. Finally, participants reported how many hours of television they watch per week and the name of their favorite television show. These questions addressed the stereotypes that heavyweight individuals are inactive and humorous (Greenberg, Eastin, Hofschire, Lachian, & Brownell, 2003).

After participants answered the above questions, the computer ostensibly compiled the summary of the other participant in the study. After a short delay, the computer presented the "getting to know you" information provided by the interaction partner. Directions instructed participants to pay close attention to their partners' characteristics and visualize her because of a later recall task. The instructions provided participants with motivation to actively process all of the presented information about the partner, regardless of the stereotypicality of the characteristics.

All participants in the study interacted with the same computer-generated female interaction partner, Alex (a name used in past research studies conducted by Pinel and colleagues). This study utilized a female interaction partner because past research indicates potential gender differences in the effects of weight-stigma on male and female targets (Fallon & Rozin, 1985; Crandall & Biernat, 1990; Crandall, 1991; Pulh & Brownell, 2001). In all conditions Alex was a white, non-Hispanic, 19 year old female with medium length brown hair, blue eyes. Importantly, she was 5'3", 220lbs, and self-identified as heavyweight.

Participants interacted with a partner whose objective characteristics either confirmed or disconfirmed stereotypes about heavyweight people. The answers provided by the computer-generated partner to the stereotype relevant questions varied by condition. In the stereotype confirmation condition, Alex was a biology major with the career aspiration of laboratory technician. Her favorite food was French fries and she had fried chicken for dinner the previous night. She reported exercising zero hours per week, did not have a preferred exercise activity, and was not currently on a diet. She indicated "Whose Line is it Anyway?" an improvisational comedy show hosted by Drew Carey that airs on Wednesday nights at 10pm, as her favorite television show and that on average, she watched 10 hours of television per week.

In the stereotype disconfirmation condition, Alex was a biology major with a career aspiration of medical doctor. Her favorite food was strawberries and she ate grilled chicken for dinner the night before. She reported six hours of exercise per week, with her preferred activity being aerobics, and she was not on a diet. Finally she indicated watching 2 hours of television per week; her favorite television show was "Dateline NBC," a broadcast news show that also aired on Wednesday nights at 10pm.

When choosing the objective characteristics for each condition, I carefully considered positivity of information and similarity across condition. In both conditions, Alex majored in biology. In each condition, Alex ate a chicken dish the night before and had a well-known favorite food. Based upon a previous survey conducted at the

University of Vermont (N=419) indicating that students exercise on average 6.21 hour per week, 6 hours of exercise per week was chosen for the stereotype disconfirmation condition so that Alex seemed like the average college student. In the confirmation condition her lack of exercise exemplified her stereotypicality. Television shows that aired on the same night of the week, in the same time slot, acted as Alex's favorite shows. Finally, to control for participants assumptions about her dieting behaviors, Alex reported not dieting in both conditions.

To control for the actual similarity of the objective characteristics provided by participants in the study and Alex, following the conclusion of the study, the responses provided by participants were coded for identicality to Alex's responses. Participants' responses that were the same as or similar to Alex's responses (e.g. participants who listed fruit as their favorite food were coded as identical to Alex's response of strawberries) were coded as 1, non-identical responses were coded as 0. A composite of objective similarity was computed and controlled for in all analyses. Similarity research suggests that possessing the same traits or characteristics as another person leads to liking for that person. Thus, controlling for actual similarity between the participants and Alex allowed for the results of the study to be interpreted as reflecting the manipulations in the study, not because of actual similarity that existed between the confederate and participants.

Online communication interaction

After reviewing the demographic summary, participants received instructions for an interactive game, a computer version of the board game Imaginiff. Pinel and colleagues (Pinel et al., 2006; Pinel & Long, under revision) modified this game to simulate I-sharing experiences. Throughout the game, participants are presented with questions and asked to make immediate answer choices. These questions are designed to be novel in effort to capture an answer provided by the subjective self, one not based upon reflection of past behavior.

Prior to beginning the Imaginiff game, participants received instructions indicating they were about to interact with the other participant in the study (computer confederate) by playing a game. To prepare participants for the unusual nature of the game, they learned that they would be asked a series of multiple choice questions that may seem uncommon or strange. The directions instructed that although this task may seem odd in nature, participants needed to answer the questions as honestly as possible and provide their gut level responses to the questions. These instructions bolster our confidence that the game tapped into the subjective self. Participants also found out that Alex, their interaction partner, would also answer the same set of questions and that her responses would be presented after each question.

The Imaginiff game consists of a series of statements (See Appendix E) that ask participants to imagine different celebrities as a variety of objects, plants, or animals. These questions are designed such that participants likely do not have past experiences to reflect upon when choosing their answers. The following is one of the twelve questions that make up the Imaginiff game, "If Oprah Whinfrey were a thing to look through, she would be… A) telescope B) reading glasses C) rose colored glasses D) safety goggles."

Because the game requires participants to answer questions with their subjective selves, I-sharing occurs when two people choose the same response for a question.

Although all participants played the Imaginiff game, some participants experienced I-sharing with Alex (I-sharing condition), some did not I-share with her (no I-sharing condition), and some participants played Imgainiff but did not see Alex's responses (control condition). Participants in the I-sharing condition had 10 of their 12 responses to the questions matched by Alex (this ratio 10:12 was taken from past studies conducted by Pinel and Long, under revision). Participants in the no I-sharing condition had their responses matched by Alex on 2 out of the 12 questions (ratio of 2:12 also taken from Pinel and Long, under revision). The control condition was included to provide information about the role of stereotype relevant Me-information when I-sharing and potential I-sharing experiences are not present.

Post-interaction questionnaires

Following the Imaginiff interaction, participants answered a series of questions assessing how much they liked Alex. A liking scale utilized by Pinel and Long (under revision, α=.90 for in-group members, α=.85 for out-group members, see Appendix F) assessed participants' liking for the interaction partners. This scale consists of 6 items on a 9 point scale (where 1=strongly disagree; 9=strongly agree) which ask participants how close they feel to, how much they want to become friends with, how comfortable they feel meeting, how much look forward to meeting, how much they would like her to be their coworker, and how much they like Alex. Consistent with past intergroup I-sharing research, Cronbach's alpha for the scale is this study was .86.

Participants also answered a question meant to assess psychological distancing. Participants to answered the following question on a 9 point scale (where 1=extremely dissimilar; 9=extremely similar), "How similar do you feel Alex is to you?" This basic measure of perceived similarity was used to assess psychological distancing was taken from Pyszczynski et al. (1993).

After the liking measure, participants completed a manipulation check that assessed how much of Alex's demographic information participants recalled. The manipulation check asked Alex's gender, age, race/ethnicity, hair length, hair color, eye color, academic major, weight, height, weight status group, her body figure, and her dieting status. Participants reported the stereotype relevant objective characteristics of Alex: her major, future job, favorite food, what she ate the night before, how many hours per week she exercised, her favorite exercise, whether she exercised, how many hours of television she watched each week, and her favorite television show. Participants were given the option "I do not recall" for each question. Any participant that could not recall three of Alex's stereotype relevant characteristics was eliminated from analyses (N=8).

They also completed a six item I-sharing manipulation check used by Pinel and colleagues in past studies that differentiates I-sharing from Me-sharing. Participants in the I-sharing condition indicated feeling significantly more subjectively similar to Alex than participants in the control and no I-sharing conditions, $F(2, 117)=27.395, p<.001$.

Preliminary survey follow-up

Following the manipulation check, the experimenter told participants that they had finished the study. He/she explained that with the remaining time in the session another research team wanted participants to complete a short follow-up survey to the initial survey that they took online. The experimenter gave participants a paper and pencil version of the original online preliminary survey and instructed them to place their completed survey in an envelope to ensure confidentiality of their responses.

Following the completion of the paper and pencil survey, the experimenter returned to the room and probed the participants for suspicion utilizing a series of interview questions. The questions began broadly (i.e. "Do you have any questions about the study?"; "Were all of the instructions clear?") and became more focused on suspicion (i.e. "Sometimes when people participate in psychology experiments, they think something might be going on that the experimenter did not tell them about. Did you get that feeling here today?"). Experimenters assigned participants with a rating of suspicion from 0-5, where 0 was not at all suspicious and 5 indicated that participants either came into the study knowing the methodology or figured out the manipulation at some point during participation. Of the one-hundred and thirty participants included in the final analyses for this project, one person was rated as a 5 on the suspicion rating scale. After probing for suspicion, participants were fully debriefed about the nature of the study, including the deception involved in the preliminary survey and the interaction on the computer generated confederate and were dismissed. No participants in this study discontinued participation once they began the laboratory study or exhibited any adverse effects as a result of the study. All participants received either extra credit or course credit as outlined by their course instructors.

Results

Data Cleaning

One hundred and thirty-nine people participated in this study. Nine participants were removed because they failed to recall their interaction partner's objective characteristics (eight failed to recall three or more stereotype relevant characteristics, one did not recall the partner's weight status). Upon removal of those participants, a sample of one hundred thirty individuals remained.

Some participants did not provide data on some of the individual difference/filler measures included in the online prescreening for this study. Given that the missing data constituted less than 5% of the entire data set and the individual difference measures did not play a central role in the hypotheses, I utilized mean substitution to replace these missing pieces of data (Tabachnick & Fidell, 2001). Further, mean substitution replaced data for one participant who did not complete the prescreening measure of the AFAT, Feeling Thermometer, Semantic Differential, and Goldfarb Fear of Fat Scale. No other participants failed to provide data on these key measures.

I also screened for univariate and multivariate outliers by condition as recommended by Tabacknick and Fidell (2001) for grouped experimental data. Based upon the recommendations of Tabacknick and Fidell (2001), standardized composite scores for the measures in this study above 3.29 and below -3.29 constituted outliers. I used Winsorization to address outliers, replacing the most extreme scores with the next highest, non-outlier, score in that condition. Of the 130 participants in this study, 8 participants emerged as outliers and 2 participants emerged as multivariate outliers.

Primary Analyses

Given the categorical nature of the independent variables in this study (I-sharing condition and stereotype condition), I analyzed the main hypotheses for this study with factorial Analysis of Covariance (ANCOVA). Hierarchical Multiple Regression analyses, utilizing effect coding of the independent variables yielded the same results as ANCOVA. For ease of interpretation, the factorial ANCOVA analyses will be presented here for hypotheses one through three.

I utilized five factorial ANCOVAs to test the hypotheses, one for each outcome: liking for Alex, prejudice toward heavyweight people as measured by the Anti-Fat Attitudes Test, the Feeling Thermometer for fat people, and the Semantic Differential for fat people, and finally psychological distancing, measured as feelings of similarity to Alex. Here I present the results for each outcome variable separately. In each analysis, participants' actual objective similarity to Alex served as a covariate, as well as applicable pre-test (online survey) measures. Both I-sharing condition and stereotype condition were entered into all analyses. Hypothesis one and two focus only on the main effects of I-sharing condition and stereotypicality on the outcomes of liking and weight-based prejudice. Hypothesis three focuses on the interaction of the I-sharing condition and stereotypicality on the outcome variables of liking, weight-based prejudice, and psychological distancing.

Liking

I predicted a main effect of both I-sharing and stereotypicality conditions for the outcome of liking. Specifically, I suggested that participants who I-shared with their interaction partner would like her more than participants who did not I-share with their partner. Consistent with literature on the effects of interacting with a stereotype disconfirming exemplar, I also predicted a main effect of stereotyicality, such that participants in the stereotype diconfirmation condition would indicate liking their partner more than those in the stereotype confirmation condition. Finally, given that the objective characteristics of a partner may matter in I-sharing experiences, I predicted a significant interaction of I-sharing and stereotype disconfirmation conditions. Participants within the I-sharing condition represented the group of specific interest for this hypothesis because the objective characteristics of their interaction partner varied. Some participants I-shared with a stereotype disconfirming partner and some I-shared with a stereotype confirming partner. If objective characteristics influence attitudes following I-sharing experiences, participants within the I-sharing condition should report different attitudes based upon their partners' objective characteristics. Mean level responses and standard errors by condition reported in this section can be found in Table 1.

To control for pre-existing attitudes toward Alex based upon her weight, the pre-test measure of Anti-Fat attitudes was entered as a covariate in the analysis for liking, as well as actual objective similarity between participants and their interaction partner. Unlike the other outcomes for this study, the online pre-test did not provide a measure of participants' liking for their interaction partner. Given that participants' attitudes toward heavyweight individuals likely influenced their attitudes toward Alex, it seemed crucial to control for that influence when examining the effect of the manipulations of liking for Alex.

Analyses revealed a significant main effect of I-sharing condition F (2, 122)=4.483, p<.05, partial eta squared=.068 (Figure 1). Given that the hypothesis focused specifically on the differences between the I-sharing condition and the no I-sharing and control conditions, I conducted planned contrasts comparing the I-sharing condition to the no I-sharing condition and the I-sharing condition and the control condition. Participants in the I-sharing condition (M=4.593) indicated liking Alex significantly more than those in the no I-sharing condition (M=3.616), F(1, 122)=8.437, p<.01, partial eta squared=.065. Differences in liking for Alex did not exist between the I-sharing condition and the control condition (M=4.322). Post-hoc analyses revealed the participants in the control condition indicated liking Alex significant more than those in the no I-sharing condition, F(1, 122)=4.144, p<.05, partial eta square=.033.

Inconsistent with the stereotype disconfirmation hypothesis, interacting with a stereotype disconfirming partner alone did not influence participants' liking for a heavyweight interaction partner. After controlling for objective similarity between the participant and the confederate, the stereotypic nature of Alex's objective characteristics did not influence participants' reports of liking for her, F(1, 122)=.001, *ns*.

The findings for the interaction between I-sharing condition and stereotype condition for the outcome of liking were not significant, F(2, 122)=1.356, p=.262 (Figure 2). Although the interaction did not approach significance, an examination of the means revealed a pattern in the expected direction. First, focusing only on participants in the I-sharing condition (N=44), participants in the stereotype disconfirmation condition (M=4.989) indicated liking Alex more than those in the stereotype confirmation condition (M=4.151). Further, post-hoc analyses revealed that for participants in the stereotype disconfirming condition (N=68), I-sharing condition significantly predicted participants' levels of liking for the disconfirming partner, $F(2, 63)=5.427$, $p<.01$, partial eta square=.147. More specifically, participants in the I-sharing/disconfirming indicated liking Alex marginally more than those in the control/disconfirming condition, $F(1, 63)=3.217$, $p=.08$, partial eta square=.049, and those in the no I-sharing/disconfirming condition, $F(1, 63)=10.812$, $p<.01$, partial eta square=.146. In contrast, no significant differences existed based upon I-sharing condition for participants in the stereotype confirmation condition (N=62), $F(2, 57)=1.291$, *ns*.

It should be noted that a post-hoc power analysis for the interaction of I-sharing and stereotypicality revealed power of .288. This suggests a 28.8% chance of correctly rejecting a false null hypothesis. Stated differently, the current study yielded a 28.8% chance of finding a difference based upon groups if those group differences existed. This lack of power suggests that a larger sample size would be needed to validate the findings of this study with respect to the observed interaction effects. The low power further leaves open the possibility that non-significant findings resulted from a small sample size.

Results revealed that I-sharing condition influenced participants' liking for their interaction partner. Specifically, consistent with hypothesis one, participants who I-shared with their partner reported liking her more than those who interacted with their partner but did not I-share with her. Participants in the I-sharing condition liked Alex marginally more than those in the control condition. Further, no main effect of stereotypicality emerged and stereotypicality did not significantly moderate the effect of I-sharing on liking. Although the interaction of I-sharing and stereotypicality did not reach statistical significance, an examination of the means revealed the predicted pattern. Of specific interest, participants who I-shared with a stereotype disconfirming partner liked her more than those who I-shared with a stereotype confirming partner. Further, no differences existed in liking for Alex based upon I-sharing condition for those in the stereotype confirming condition.

Anti-fat Attitudes Test

This study utilized multiple measures of participants' level of prejudice toward heavyweight individuals, the Anti-fat Attitudes Test (AFAT; Lewis et al., 1997), the Semantic Differential for fat people, and a Feeling Thermometer for fat people, the results for each measure will be reported separately.

For the AFAT, the measure characterisized as rational based upon Epstein's (2003) distinction between rational and experiential systems, I predicted main effects of I-sharing and stereotyicality conditions, as well as a significant interaction of the independent variables. Mean level responses and standard errors by condition can be found in Table 2. Crimin & Pinel (2008) utilized the AFAT (Lewis et al., 1997) in previous research examining I-sharing with heavyweight women and found that I-sharing did not predict participants' weight-based prejudice as measured by the AFAT.

Consistent with this finding, after controlling for pre-test scores on this measure and objective similarity between participants' and Alex, no effect of I-sharing condition on Anti-fat Attitudes surfaced, $F(2, 122) = 1.099$, *ns*. I-sharing condition did not predict Ant-fat Attitudes. Similarly, contrary to predictions based upon the literature on stereotype disconfirmation, stereotypicality information did not significantly predict participants' prejudice toward heavyweight people as a group, $F(1, 122)=1.325$, *ns*. Finally, I-sharing condition and stereotypicality condition did not significantly interact to predict participants liking for their heavyweight interaction partner, $F(2, 122)=.991$, *ns*.

In summary, none of the predicted effects of I-sharing and stereotypicality conditions emerged for the outcome of Anti-fat Attitudes, providing no support for the hypotheses with respect to this measure of weight-based prejudice. Previous research on I-sharing suggested that one possible explanation for the lack of effect of I-sharing on weight-based prejudice as measured by the Anti-fat Attitudes Test (Lewis et al., 1997) may have to do with the highly cognitive nature of the measure. Given that I-sharing operates on the subjective aspect of the self, the current study aimed to extend the findings of Crimin and Pinel (2008) by using two other measures of prejudice hypothesized to be more experiential in nature.

Semantic Differential

This study utilized the Semantic Differential Task adapted from Hassenberg et al. (2006). As with the other outcomes of interest, I predicted main effects of I-sharing and stereotypicality conditions. I also hypothesized that I-sharing's effect on the Semantic

Differential Task would be moderated by stereotyicality condition. Means and standard errors by condition appear in Table 3.

Similar to the findings for the Anti-fat Attitudes Test (Lewis et al., 1997), after controlling for objective similarity and the pre-test Semantic Differential levels, analyses indicated no significant differences on the Semantic Different based upon I-sharing condition, $F(2, 122)=.04$, *ns*. Further, upon controlling for objective similarity and pre-test measures of the Semantic Differential Task, stereotypicality did not predict post-test Semantic Differential for Fat People scores, $F(2, 121)=.096$, *ns*. Finally, the interaction between I-sharing and stereotypicality conditions did not reach significance, $F(2, 122)=.356$, *ns*.

Consistent with the findings for Anti-fat Attitudes, neither I-sharing nor stereotypicality condition, nor their interaction, influenced participants' feelings for heavyweight individuals as measured by the Semantic Differential Task. Furthermore, no support was found for hypothesis one, two, or three with respect to this outcome measure.

Feeling Thermometer for Fat People

This study utilized one final measure of weight-based prejudice theorized to be experiential in nature, the Feeling Thermometer, and hypotheses mirrored those for Anti-fat Attitudes and the Semantic Differential task (see table Table 4 for means and standard errors by condition). After controlling for the pre-test measure on the Feeling Thermometer and participants' objective similarity to Alex, marginal differences existed amongst I-sharing conditions for the Feeling Thermometer for Fat People, $F(2, 122)= 2.235$, $p=.11$, partial eta square= .035 (Figure 3). Planned contrasts comparing the I-sharing condition (*M*=82.783) to the control (*M*=76.528) and no I-sharing condition (*M*=80.379) revealed that participants in the I-sharing condition felt significantly more positive towards heavyweight people as a group than participants in the control condition, $F(1, 122)=4.236$, $p<.05$, but did not differ significantly from participants in the no I-sharing condition $F(1, 122)=.751$, *ns*. Post-hoc analyses indicated no differences in participants' feelings of positivity toward heavyweight individuals in the control and no I-sharing conditions, $F(1,122)=1.629$, *ns*.

Moving now to the results for hypotheses two and three, after controlling for participants' objective similarity to Alex and the pre-test measure of the Feeling Thermometer for Fat people, stereotypicality did not significantly predict feelings of positivity toward her group, $F(1, 126)=.542$, *ns*. Finally, no significant interaction between I-sharing condition and stereotypicality condition emerged, $F(2, 122)=.362$, *ns*.

Analyses provided some evidence that I-sharing condition influenced participants' feeling of positivity toward heavyweight individuals, as measured by the Feeling Thermometer. Contrary to hypotheses two and three, stereotypicality condition did not predict feelings of positivity toward heavyweight people as a group or moderate the effect of I-sharing.

Psychological Distancing

The final outcome of interest focused on psychological distancing, measured through feelings of similarity to Alex. Given the feelings of closeness fostered by I-sharing experiences and the negative nature of stereotype confirming objective characteristics in heavyweight people, I predicted an interaction between I-sharing and stereotypicality conditions for the outcome of psychological distancing. Based upon a priori theorizing, the contrast of participants who I-shared with a stereotype confirming partner and those who I-shared with a stereotype disconfirming partner served a particular interest.

A factorial ANCOVA tested the hypothesis, with objective similarity to Alex entered as a covariate. Contrary to predictions, overall analyses indicated a significant main effect of I-sharing condition on participants' reported feelings of similarity to Alex, $F(2, 123)=36.602$, $p<.001$, partial eta square=.373. Post-hoc analyses revealed that participants in the I-sharing condition ($M=5.296$) indicated feeling significantly more similar to Alex than participants in the control condition ($M=3.202$), $F(1, 123)=23.959$, $p<.001$, partial eta squared=.163, and participants in the No I-sharing condition ($M=1.759$), $F(1, 123)=72.291$, $p<.001$, partial eta squared=.371.

Inconsistent with the other outcome measures in this study and the hypotheses, after controlling for objective similarity, stereotype condition predicted feelings of similarity toward Alex, $F(1, 123)=4.950$, $p=.028$, partial eta square=.039. Specifically, participants who interacted with a heavyweight partner whose objective characteristics disconfirmed stereotypes about heavyweight people reported feeling more similar to Alex ($M=3.788$) than participants who interacted with a partner whose objective characteristics confirmed stereotypes about heavyweight people ($M=3.023$).

The main hypothesis for psychological distancing examined whether stereotype condition moderated the effect of I-sharing on psychological distancing from Alex, as measured by feelings of similarity to Alex. Contrary to predictions, the interaction between I-sharing condition and stereotype condition did not reach significance, $F(2, 123)=.331$, *ns*.

Research from the psychological distancing literature inspired a final exploratory hypothesis for this study. An exploratory three-way interaction examined the role that one's own fear of becoming heavyweight plays in I-sharing with a stereotype confirming or disconfirming I-sharing partner. Specifically, I predicted that participants' own fear of becoming heavyweight would be an important factor for those who interacted with a stereotype confirming I-sharer, such that for individuals high in fear of fat the closeness fostered by I-sharing experiences might actually be negative and threatening. To protect themselves from this threatening experience, high fear of fat individuals might show less liking, more prejudice toward heavyweight people in general, and more psychological distancing from their interaction partner.

Given the continuous nature of the Goldfarb Fear of Fat (Goldfarb et al., 1985) scale, I used Hierarchical Multiple Regression to conduct the analyses. I computed an effect coded variable for stereotype condition (where 1= stereotype disconfirming and -1= stereotype confirming) and two effect coded variables for I-sharing condition (I-sharing condition was the comparison group in this coding system and always coded at 1; see Keith, 2006).

The analytical approach for each of the five outcome variables--liking for Alex, Anti-fat Attitudes, Semantic Differential for fat people, Feeling Thermometer for fat people, and similarity to Alex--was identical. In all analyses, participants' objective similarity to Alex was entered in the first step of the regression along with any applicable pre-test measure (i.e., measures of Anti-fat Attitudes, Feeling Thermometer, and Semantic Differential from online survey). I-sharing condition (represented by two effect coded variables), stereotype condition (represented by one effect coded variable), and Fear of Fat were entered in the second step. Step three added to the predictors all possible two way interactions between I-sharing condition, stereotype condition, and Fear of Fat. The final step included all possible three way interactions. In steps three and four, Fear of Fat was always centered prior to computing the interaction terms.

None of the results from the five Hierarchical Multiple Regression analyses conducted supported hypothesis three b. There were no significant three-way interactions found for any of the five outcome variables, and the addition of the three-way interactions did not explain any additional variance in any of the outcomes.

It should be noted that in the analysis for the outcome liking for Alex, the third step of the regression did result in significant change from step two, $R=.392$, R-square change=.091, $p<.05$ (Table 5). Looking to the interaction terms entered in this step, one sees that the interaction of Fear of Fat and the effect coded comparing the I-sharing condition to the No I-sharing condition is significant, $b=.737$, $p<.05$. This interaction is not central to the hypotheses and will not be discussed in further detail.

In sum, the analyses revealed mixed support for the hypotheses in this study. First, I-sharing condition predicted liking for a heavyweight interaction. Specifically, those who I-shared with a heavyweight partner indicated liking her significantly more than those who did not I-share with a heavyweight interaction partner. I-sharing condition also predicted an experiential measure of prejudice, with participants in the I-sharing condition indicating the highest levels of positive feelings toward heavyweight people as a group. Inconsistent with hypotheses, participants who I-shared with a heavyweight partner indicated feeling significantly more similar to her than participants in the control and no I-sharing groups. Contrary to predictions, the stereotypic nature of the interaction partner's objective characteristics did not seem to influence participants' judgments of liking for their partner or level of prejudice toward her group. Stereotype condition did influence psychological distancing from the heavyweight interaction partner, with participants in the stereotype disconfirmation condition indicating feeling more similar to Alex than those in the stereotype confirmation condition. Marginal support was found for the hypothesis that I-sharing's effect would be moderated by the stereotypicality of the heavyweight interaction partner's objective characteristics. Specifically, those who I-shared with a heavyweight partner whose objective characteristics disconfirmed stereotypes about heavyweight people indicated liking her more than those who I-shared with a stereotype confirming heavyweight partner, and there were not differences based upon I-sharing condition for those who interacted with a stereotype confirming partner. The hypothesis that one's own fear of becoming heavyweight would moderate the above findings was not supported.

Exploratory analyses

Given the unexpected difference in the pattern of results that emerged for the outcomes of liking and feeling thermometer for heavyweight people, I conducted a series of exploratory analyses to better understand the results. To determine potential explanatory factors for the differences, I correlated all individual difference measures and outcomes with liking and the feeling thermometer by condition. Interestingly, the similarity item hypothesized a priori to measure psychological distancing from the interaction partner surfaced as a correlate of liking in all conditions. In contrast, the same similarity item only significantly related to the feeling thermometer in the I-sharing/disconfirmation condition.

Based upon these correlations, and the knowledge that I-sharing condition predicted feelings of similarity to Alex, I conducted mediational analyses to determine whether similarity mediated the effect of I-sharing condition on liking. The analysis conducted utilized the steps outlined by Baron and Kenny (1989) for testing mediation. Results revealed that when examining the comparison between the I-sharing and no I-sharing conditions, feelings of similarity marginally partially mediated the effect of I-sharing on liking (Sobel test statistic=-1.687, p=.09). Further, feelings of similarity did not mediate the relationship between I-sharing condition and the feeling thermometer.

Given that concurrent nature of the data collection (the close proximity of the liking and similarity measures in the study), I tested an alternative model with liking mediating the relation between I-sharing and similarity. Analyses revealed that liking did not mediate the link between I-sharing and similarity to Alex, lending further credence to the suggestion that feelings of similarity seem to account for the link between I-sharing and liking but not the relation between I-sharing and the feeling thermometer.

Discussion

Previous research on I-sharing suggests that fostering shared subjective experiences between objectively different individuals results in increased positive attitudes toward stigmatized others (Pinel & Long, under revision; Pinel et al., under review). Recently, Crimin and Pinel (2008) applied I-sharing experiences to relationships with heavyweight individuals, arguably the most highly stigmatized individuals in the United States society today (Crandall, 1994), with revealed promising results. The current study sought to replicate and extend the findings of Pinel and colleagues (Crimin & Pinel, 2008; Pinel & Long, under revision; Pinel et al., 2006; Pinel et al., under review) by examining I-sharing's power to increase positive attitudes toward heavyweight individuals, as well as to explore the role that stereotype relevant objective characteristics play in these I-sharing relationships.

By exposing participants to a heavyweight partner who either did or did not I-share with them, this study replicated the findings of Crimin and Pinel (2008) showing that I-sharing with a heavyweight partner results in higher levels of liking for her as compared to not I-sharing. Considering the severe nature of weight-based stigma in the United States society today, this finding alone speaks to the power of I-sharing to foster interpersonal connectedness. Heavyweight individuals face prejudice on multiple fronts, in the job market, in the home, and even from other heavyweight individuals (Crandall, 1990; Crandall, 1994; Puhl & Brownell, 2000; Puhl & Brownell, 2006). I-sharing may serve as a potentially useful means to reduce prejudice towards this group when other strategies for prejudice reduction may not be useful.

One question lingered from Crimin and Pinel's (2008) findings why did I-sharing not reduce anti-fat attitudes? To address this question the current research incorporated two measures hypothesized to be more experiential in nature and based less upon a rational mindset than the Anti-fat Attitudes Test (Lewis et al., 1997). Based upon previous research conducted by Long and Pinel, I predicted that these experientially based measures better represented attitudes changed by sharing of the subjective self (i.e., the Feeling Thermometer and Semantic Differential Task). Consistent with this hypothesis, I-sharing experiences influenced feelings of warmth toward heavyweight people as a group as measured by the Feeling Thermometer, such that those who I-shared with a heavyweight partner indicated feeling more positive toward heavyweight people than participants who did not I-share with the partner and those in the control condition. However differences did not surface on the Semantic Differential task based upon I-sharing condition.

Although I hypothesized the Semantic Differential to be a more experiential measure of prejudice, the task does not call for gut level, emotional, responses in the same manner as the Feeling Thermometer. For this reason, one might argue that the Semantic Differential represents a measure of prejudice more experiential than the Anti-fat Attitudes Test but more rational than the Feeling Thermometer. This difference provides one possible explanation for the lack of influence that I-sharing condition had on this particular measure of prejudice.

Given the small number of published research studies that successfully reduced levels of prejudice toward heavyweight people, the notion that I-sharing experiences increased levels of warmth is truly an exciting finding. Importantly, differences in prejudice on this measure existed after controlling for a pre-manipulation measure of participants' feelings of warmth toward heavyweight people, measured through the online survey conducted in phase one of the study. Although not reported in the findings for this study, these differences held after controlling for suspicion of the I-sharing manipulation and individual differences in social desirability. Given the precautions taken to rule out plausible factors that may have accounted for this finding, and the experimental nature of the study, it seems that I-sharing experiences meaningfully impacted participants' prejudice toward heavyweight people.

Although I-sharing influenced participant's reported levels of liking for a heavyweight interaction partner and their feelings of warmth toward heavyweight people as a group, a number of questions surface when examining the findings. First, analyses revealed a striking difference in the pattern of results for liking of the interaction partner and feelings of warmth toward heavyweight people. For liking, participants in the control condition reported liking their partner more than participants in the no I-sharing condition but less than those in the I-sharing condition. Looking at group level means on the Feeling Thermometer, participants in the control condition reported the lowest levels of warmth toward heavyweight people, with those in the no I-sharing condition reporting slightly more warmth than control and less warmth than participants who I-shared with their partner.

To better understand these findings, I conducted exploratory analyses. When I examined factors that influenced liking but not the feeling thermometer, participants' feelings of similarity to Alex surfaced as influential. Specifically, feelings of similarity to Alex partially accounted for the link between I-sharing condition and liking, but not the link between I-sharing condition and the Feeling Thermometer. The notion that I-sharing fosters feelings of similarity corresponds with Pinel and colleagues claim that I-sharing fosters feelings of closeness and helps to bridge the existential divide. Participants in the I-sharing condition reported the highest feelings of similarity to Alex (*M*=5.2955) and participants in the no I-sharing condition (*M*=1.7609) reported the lowest level of similarity to Alex. The differences found for the outcome of liking correspond with the notion I-sharing fosters feelings of similarity and similarity in turn predicts liking because participants who I-share with their partner should feel more similar to her than those in the control condition and participants who do not I-share with their partner should feel less similar than the baseline control.

Although feelings of similarity to the interaction partner do shed light upon the pattern of results for liking, the lack of association between similarity and the feeling thermometer ratings suggests that similarity does not explain difference in attitudes toward heavyweight people as a group. Participants in the I-sharing condition reported the most warmth toward heavyweight people (*M*= 82.8), followed by those in the no I-sharing condition (*M*=80.383), and control condition (*M*=76.656).

One possible explanation for the elevation of feelings of warmth in the no I-sharing condition from the control stems from the nature of the I-sharing task and possible intergroup contact. In this study the game Imaginiff served as the I-sharing manipulation. In the I-sharing and the no I-sharing conditions, participants played the game with their interaction partner through the exchange of feedback, in the control condition participants received no feedback from their partner. Although participants in the no I-sharing condition got non I-sharing feedback from their partners, they still interacted with a heavyweight individual in a potentially fun and engaging manner. After all, Pinel and Long (under revision) adapted the version of Imaginiff utilized in this study from a board game. Playing Imaginiff with a partner, regardless of the nature of the I-sharing experience, may be inherently amusing and fun because it is a game. For that reason the non I-sharing experience may represent a positive intergroup contact experience for participants, and result in increased feelings of warmth for heavyweight people as a group without increasing feelings of liking for the specific non I-sharing interaction partner. In contrast, participants in the control condition did not have an I-sharing experience or a positive intergroup experience with a heavyweight individual, explaining the low levels of warmth reported by participants in this condition.

This interpretation highlights an unanticipated flaw of utilizing the Imaginiff game to manipulate I-sharing. Given that previous studies conducted by Pinel and colleagues included only I-sharing and no I-sharing groups, this interpretation opens up the possibility that the weak effect of I-sharing on group level attitudes may be an artifact of the Imaginiff game. Further, previous studies did not utilize the experiential measure of group attitudes, the Feeling Thermometer. Creating alternative methodology to manipulate I-sharing remains an important future goal of future I-sharing research and will further clarify the findings of the current study.

Measurement concerns also surface as a possible explanation for the difference in the pattern of results seen on the feeling thermometer for fat people and the measure of liking for Alex. One might argue that something inherent in the nature of the feeling thermometer or the liking scale drove the observed effects. In anticipation of this problem, I included an exploratory feeling thermometer asking participants to rate feelings of warmth and positivity toward Alex in this study. Analyses with respect to this outcome revealed the same pattern of findings as the liking measure, participants in the I-sharing condition indicated the most warmth toward Alex (M=87.21), those in the no I-sharing condition indicated the least warmth toward Alex (M=68.83), and those in the control condition indicated feelings of warmth in between the two other conditions (M=74.72). This finding lends support to the notion that measurement is not driving the difference in patterns observed on the outcomes of liking and feeling thermometer for fat people.

Examining the role of stereotype relevant objective characteristics in I-sharing relationships served as a second goal of this study. Contrary to predictions, exposing participants to a stereotype disconfirming heavyweight woman alone did not influence liking for her or attitudes toward heavyweight people as a group. One possible explanation for the lack of findings stems from the stereotype disconfirmation literature. Researchers argue that exposure to one single stereotype disconfirming exemplar is not likely to lead in attitude change because people engage in a process of subtyping the exemplar as an exception to the stereotype. Further, research also shows that people generally acknowledge that not every member of a stereotyped group actually represents the stereotypes about that group. People recognize and expect variability within a group, but still utilize stereotypes because, in general, they seem to be helpful (Weber & Crocker, 1983). These arguments suggest exposing participants to multiple stereotype disconfirming partners in effort to discern what influence stereotypes alone play on participants judgments of heavyweight partners as a future direction for this research.

Given that the goals of this study extended beyond simply testing stereotype disconfirmation as a strategy for prejudice reduction, the interaction of I-sharing and stereotypicality served a particular importance. Although the interactions of interest did not reach significance, mean level response for the outcome of liking suggest that stereotype relevant characteristics may in fact play an important role in I-sharing relationships. Specifically, participants who I-shared with a heavyweight female whose objective characteristics disconfirmed stereotypes about heavyweight people indicated liking her more than those who I-shared with a stereotype confirming partner. Further, in the control condition, participants who interacted with the stereotype confirming partner actually indicated liking her more than the disconfirming partner, a pattern that I-sharing reversed. The findings suggest that when examining judgments of a particular stigmatized individual, her stereotype relevant objective characteristics may be important. However, caution should be taken when interpreting the findings from this study given that no significant interactions emerged.

Independent of the findings for this study, an important limitation of the stereotype consistency manipulation should be discussed. The manipulation of stereotype characteristics was not pre-tested for effectiveness or accuracy in anyway before beginning the study. All decisions about what relevant characteristics to include and how to manipulate them were based upon theoretical considerations. Further, the manipulation check for this study neglected to ask participants to report on the stereotypicality of their partner. Instead, participants reported the characteristics of their partner for the purpose of checking whether they recalled their partner's stereotype relevant information. In this sense, there is no solid evidence that participants processed their interaction partners as stereotype consistent or inconsistent. Given that theory drove the choice of objective characteristics, one can be confident that participants interacted with partners whose objective characteristics were inconsistent or consistent with stereotypes based upon theoretical distinctions. Although this poses a limitation of the current findings, it also provides a relevant direction for future research that would immediately validate and extend the findings of the current study.

An exploratory goal of this study examined the role that psychological distancing plays in I-sharing with a disliked other. Although some surprising main effects surfaced for this outcome, careful consideration is needed before drawing conclusions. Psychological distancing was operationalized by utilizing a single item measure of similarity taken from previous research, "How similar do you feel Alex is to you?" The theory behind using the measure reasoned that under pressure to psychologically distance oneself from the interaction partner, participants would indicate that Alex was less similar to them.

Contrary to predictions, I-sharing condition and stereotype disconfirmation condition resulted in less psychological distancing from Alex. The problem for interpreting these results comes when one considers the measure of psychological distancing, feelings of similarity. Although there are differences based upon stereotype condition, it is not clear whether differences in feelings of similarity resulted for psychological distancing or the fact that participants may have actually felt similar to the disconfirming partner. This confusion again stems from the lack of validation of the stereotype manipulation. Further, differences in feelings of similarity by I-sharing condition could be expected, independent of psychological distancing, because I-sharing experiences are an indication of similarity amongst individuals. In some respects, this question acts as a manipulation check showing that I-sharing indeed fostered feelings of closeness.

Because of the ambiguity in the measure of similarity, the findings with regard to psychological distancing in this study should be viewed with caution. Bolstering this suggestion is the notion that the predicted three-way interaction that one's own fear of becoming heavyweight would be particularly important for participants who I-shared with a stereotype confirming partner was not supported. In reality, the fear of fat scale utilized measured fear of weight gain, not fear of being a stereotype confirming or disconfirming heavyweight person, for this reason the stereotypical nature of the I-sharing partner may not have been relevant for the concept of psychological distancing. Further, the small sample sizes may have contributed to the lack of findings. Despite those limitations, one must always consider that the concept of psychological distancing itself may not be as relevant to I-sharing relationships as hypothesized or is perhaps relevant in a different way.

One final limitation of this study surfaces when considering the recruitment criteria utilized. When the study began, a BMI score of 25.0 served as the upper limit for recruitment. Based upon the initial response to the study, I relaxed the criteria to include participants with BMIs 27.0 or less. A few important consideration should be addressed with respect to utilizing a criteria that medically places participants into a category of moderately overweight. First, the final sample included only 20 participants with BMIs above 25.0. Analyses conducted without participants whose BMI exceeded 25.0 yielded identical results to analyses including those addition 20 participants. Further, all participants in this study self-identified as lightweight or medium weight. Although some participants' BMI indicated overweight status, their own self-identification as light or medium weight, coupled with Alex's BMI of 39.0 lends credence to identification of this study as an intergroup interaction.

Findings of heavyweight individuals own prejudice toward heavyweight people as a group are also important here. Previous research suggests that one's own weight status does not predict levels of prejudice toward members of this group. Stated more explicitly, heavyweight people view heavyweight as negatively as light or medium weight individuals (Crandall, 1994). Further, Crimin and Pinel (2008) utilized a sample with light, medium, and heavyweight individuals and differences did not surfaces based upon self-identified weight status. For this reason, I feel that the expansion of recruitment to individuals with BMIs of 27.0 does not serve as a limitation.

Results from this study provide further support that I-sharing may be a useful mechanism for positive attitudes toward heavyweight people. Understanding the negativity surrounding weight in the United States and the rising rates of obesity and overweight in our culture further highlights this study as a significant contribution to the literature of prejudice reduction as it pertains to heavyweight individuals. A literature search identified no previous study that was able to show prejudice reduction and increased positive attitudes toward the heavyweight in a normative college sample. Given the relevance of weight in our culture and the amount of research surrounding weight based stigma, it is hard to imagine that no previous research team has attempted a prejudice reduction study in a normative sample.

For these reasons, the findings of this study lay crucial groundwork for the creation of interventions for prejudice toward heavyweight individuals. Future research must replicate and extend the findings of the current study to further understand the role of stereotype relevant objective characteristics in I-sharing experiences. As the literature on I-sharing broadens, new methods to operationalize and manipulate I-sharing will increase the external validity of studies beyond the lab environment. Further, the distinction between experientially and cognitively based measures of prejudice needs to be explored given the differential findings in this study. Consideration of Epstein's (2003) description of the experiential self as immediate and emotional, suggests that measures of automatic prejudice toward heavyweight people, such as the Implicit Associates Test (IAT; Greenwald, McGhee, & Schwartz, 1998), may be a potential future outcome of interest for I-sharing research.

The social psychological literature on prejudice toward heavyweight individuals paints a relatively dark outlook for the well-being and livelihood of members of this group. Not only do heavyweight people not utilize the self-protective properties of their stigma (Crocker & Major, 1989), they also face prejudice and discrimination on multiple fronts, in the workplace, in the legal realm, and even in relationship with family members

(Crandall, 1991; Puhl & Brownell, 2000). The current study provides a hopeful mechanism to alleviate heavyweight individuals of some of the consequences of their identity. Fostering shared subjective experiences, or I-sharing experiences, allow for feelings of closeness and their positive effects despite the negative nature of weight stigma. It seems that connecting with a heavyweight individual at the level of the subjective self may temper weight-based prejudice.

References

Allport, G. W. (1954). *The nature of prejudice*. Oxford, England: Addison-Wesley.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachment as a fundamental human motivation. *Psychological Bulletin, 117,* 497-529.

Bell, C. G., Walley, A. J., & Froguel, P. (2005). The genetics of human obesity. *Nature Reviews*, 6, 221-234.

Blaine, B., DiBlasi, D. M., & Connor, J. M. (2002). The effect of weight loss on perceptions of weight controllability: Implications for prejudice against overweight people. *Journal of Applied Biobehavioral Research, 7*(1), 44-56.

Blaine, B., & Williams, Z. (2004). Belief in the controllability of weight and attributions to prejudice among heavyweight women. *Sex Roles, 51*(1-2), 79-84.

Bowlby, J. (1969). *Attachment and loss* (Vol. 1). New York: Basic Books.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17,* 475-482.

Byrne, D., Clore, G. L., & Smeaton, G. (1986). The attraction hypothesis: Do similar attitudes affect anything? *Journal of Personality and Social Psychology, 51,* 1167-1170.

Carpenter, K. M., Hasin, D. S., Allison, D. B., & Faith, M. S. (2000). Relationships between obesity and DSM-IV major depressive disorder, suicide ideation, and suicide attempts: Results from a general population study. *American Journal of Public Health, 90*(2), 251-257.

Cramer, P., & Steinwert, T. (1998). Thin is good, fat is bad: How early does it begin? *Journale of Applied Developmental Psychology, 19*(3), 429-451.

Crandall, C. S. (1991). Do heavy-weight students have more difficulty paying for college? *Personality and Social Psychology Bulletin, 17*(6), 606-611.

Crandall, C. S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology, 66*(5), 882-894.

Crandall, C. S. & Biernat, M.R. (1990). The ideology of anti-fat attitudes. *Journal of Applied Social Psychology, 20*, 227-243.

Crandall, C.S., & Martinez, R. (1996). Culture, ideology, and antifat attitudes. *Personality and Social Psychology Bulletin, 22*(11), 1165-1176.

Cramer, P. & Steinwert, T. (1998). Thin is good, fat is bad: How early does it begin? *Journal of Applied Developmental Psychology, 19*(3), 429-451.

Crimin, L.A. & Pinel, E.C. (2008). Can you see past my size if our "I"s connect?: I-sharing as an antidote for weight-based prejudice. Poster presented at Society for Personality and Social Psychology Annual Meeting. Albuquerque, NM.

Crocker, J., Cornwell, B., & Major, B. (1993). The stigma of overweight: Affective consequences of attributional ambiguity. *Journal of Personality and Social Psychology, 64*(1), 60-70.

Crocker, J., Major, B., & Steele, C. (1998). Social Stigma. In S. Fiske, D. Gilbert, and G. Lindzey (Eds.), *The Handbook of Social Psychology*, Vol 2, (pp.504-553). Boston, MA: McGraw-Hill.

Crowne, D. P, Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24,* 349-354.

Cusumano, D. L., & Thompson, J. K. (2001). Media influence and body image in 8-11-year-old boys and girls: A preliminary report on the multidimensional media influence scale. *International Journal of Eating Disorders, 29*, 37-44.

Depaulo, B. M. & Frieman, H. S. (1998). Nonverbal communication. In S. Fiske, D. Gilbert, and G. Lindzey (Eds.), *The Handbook of Social Psychology, Vol 2*, (pp.3-29). Boston, MA: McGraw-Hill.

Duckitt, J. H. (1992). Psychology and prejudice: A historical analysis and integrative framework. *American Psychologist, 47*(10), 1182-1193.

Epstein, S. (2003). Cognitive-experiential self-theory of personality. In Million, T., & Lerner, M.J. (Eds), *Comprehensive Handbook of Psychology, Volume 5: Personality and Social Psychology* (pp. 159-184). Hoboken, NJ: Wiley & Sons.

Falkner, N.H., French, S.A., Jeffery, R.W., Neumark-Sztainer, D., Sherwood, N.E., & Morton, N. (1999). Mistreatment due to weight: prevalence and sources of perceived mistreatment in women and men. *Obesity Research*, *7*, 572-576.

Fallon, A. E. & Rozin, P. (1985). Sex differences in perceptions of desirable body size. *Journal of Abnormal Psychology, 94*, 102-105.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117-140.

Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In S. Fiske, D. Gilbert, and G. Lindzey (Eds.), *The Handbook of Social Psychology*, Vol 2, (pp.357-399). Boston, MA: McGraw-Hill.

Fiske, S. T., Xu, J., Cuddy, A. J. C., & Glick, P. S. (1999). (Dis)respecting versus (dis)liking: Status and interdependence predict ambivalent stereotypes of competence and warmth. *Journal of Social Issues, 55*, 473-489.

Forster, J., Higgins, E. T., & Worth, L. (2004). How threat from stereotype disconfirmation triggers self-defense. *Social Cognition, 22*(1), 54-74.

Fromkin, H. (1970). Effects of experimentally aroused feelings of undistinctiveness upon valuation of scarce and novel experiences. *Journal of Personality and Social Psychology, 16*(3), 521-529.

Glasser, I. (1988). Affirmative action and the legacy of racial injustice. In P. A. Katz & D. A. Taylor (Eds). *Eliminating racism: Profiles in controversy* (pp. 341-356), Plenum Press, New York: NY.

Glick, P. & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491-512.

Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity.* New York: Prentice Hall.

Greenberg, B. S., Eastin, M., Hofschire, L., Lachian, K., & Brownell, K. D. (2003). Portrayals of overweight and obese individuals on commercial television. *American Journal of Public Health, 93*(8), 1342-1348.

Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R. Baumeister (Ed.), *Public self and private self* (pp. 189-212). New York: Springer-Verlag.

Greenwald, A.G., McGhee, D.E., & Schwartz, J.L.K. (1998). Measuring individual differences in implicit cognition: the Implicit Association Test. *Journal of Personality and Social Psychology, 85*, 197-216.

Harvard School of Public Health (2005, July 14). *Despite conflicting studies about obesity, most Americans think the problem remains serious.* Retrieved September 25, 2006, from http://www.hsph.harvard.edu/press/releases/press07142005.html

Hill, A. J., Oliver, S., & Rogers, P. J. (1992). Eating in the adult world: The rise of dieting in childhood and adolescence. *British Journal of Clinical Psychology, 31*, 95-105.

Hilton, J. L. & von Hippel, W. (1996). Stereotypes. *Annual Review of Psychology, 47*, 237-271.

Hedley, A. A., Ogden, C. L., Johnson, C. L., Carroll, M. D., Curtin, L. R., & Flegal, K. M. (2004). Prevalence of overweight and obesity among U.S. Children, adolescent and adults, 1999-2002. *Journal of American Medical Association, 291*(23), 2847-2850.

Henry, P. J., & Sears, D. O. The Symbolic Racism 2000 Scale. *Political Psychology, 23*(2), 253-283.

Ickes, W. (2003). Everyday mind reading: Understanding what other people think and feel. Amherst, NY: Prometheus Books.

James, W. (1890/1918). *Principles of psychology.* Toronto: General Publishing Company.

Katz, I. & Hass, G. R. (1988). Racial ambivalence and American value conflict: correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology, 55*(6), 893-905.

Keith, T. Z. (2006). *Multiple Regression and Beyond.* Pearson Education: MA.

Klaczynski, P. A., Goold, K. W., & Mudry, J. J. (2004). Culture, obesity stereotypes, self-esteem, and the "thin ideal": A social identity perspective. *Journal of Youth and Adolescence, 33*(4), 307-317.

Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2005). *Individual differences in the need to belong: Mapping the nomological network.* Manuscript, Wake Forest University.

Lewis, R. J., Cash, T. F., Jacobi, L., Bubb-Lewis, C. (1997). Prejudice toward fat people: The development and validation of the antifat attitudes test. *Obesity Research, 5*(4), 297-307.

Lyon, H. N., & Hirschhorn, J. N. (2005). Genetics of common forms of obesity: a brief overview. *American Journal of Clinical Nutrition, 82*, 215S-217S.

Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology, 56*, 393-421.

Marcus-Newall, A., Miller, N., Holtz, R., & Brewer, M. (1993). Cross-cutting category membership with role assignment: A means for reducing intergroup bias. *British Journal of Social Psychology, 32*, 125-146.

McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91-125). Orlando, FL: Academic Press.

Mendelson, B. K., White, D. R., & Mendelson, M. J. (1996). Self-esteem and body esteem: Effects of gender, age, weight. *Journal of Applied Developmental Psychology, 17*, 321-346.

Miller, C.T. & Downey, K.T. (1999). A meta-analysis of heavy-weight and self-esteem. *Personality and Social Psychology Review, 3*, 68-84.

Miller, C. T., Rothblum, E. D., Felicio, D., & Brand, P. (1993). Compensating for stigma: Obese and nonobese women's reaction to being visible. *Personality and Social Psychology Bulletin, 21*(10), 1093-1106.

Pettigrew, T. F. & Tropp, L. R. (2000). Does intergroup contact reduce prejudice? Recent meta-analytic findings. In S. Oskamp (Ed.) *Reducing prejudice and discrimination* (pp. 93-114). Mahwah, NJ: Erlbaum.

Pinel, E.C., & Long, A. (under revision). When I's meet: I-sharing as both a cause and cure of ingroup favoritism.

Pinel, E.C., Long, A., & Crimin, L.A. (accepted pending revision). We're getting warmer, they're getting more competent. *European Journal of Social Psychology.*

Pinel, E.C., Long, A., Landau, M., Alexander, K., & Pyszczynski, T. (2006). Seeing I to I: a path to interpersonal connectedness. *Journal of Personality and Social Psychology, 90*(2), 243-257.

Pinel, E.C., Long, A., Landau, M.J, & Pyszczynski, T. (2004). I-Sharing, the problem of existential isolation, and their implications for interpersonal and intergroup phenomena. In J. Greenberg, S. L. Koole, L. Sander, & T. Pyszczynski (Eds), *Handbook of Experimental Existential Psychology* (pp. 352-368). New York, NY, US: Guilford Press.

Puhl, R., & Brownell, K.D. (2001). Bias, discrimination, and obesity. *Obesity Research, 9*, 788-804.

Puhl, R., & Brownell, K.D. (2006). Confronting and coping with weight stigma: An investigation of overweight and obese adults. *Obesity, 14*, 1802-1815.

Pyszczynski, T., Abdollahi, A., Solomon, S., Greenberg, J., Cohen, F., & Weise, D. (2006). Mortality salience, martyrdom, and military might: the great Satan versus the Axis of Evil. *Personality and Social Psychology Bulletin, 32*(4), 525-537.

Quinn, D. M., & Crocker, J. (1999). When ideology hurts: Effects of belife in the protestant ethic and feeling overweight on the psychological well-being of women. *Journal of Personality and Social Psychology, 77*(2), 402-414.

Robinson, B. E., Bacon, J. G., & O'Reily, J. (1993). Fat phobia: Measuring, understanding, and changing anti-fat attitudes. *International Journal of Eating Disorders, 14*(4), 467-480.

Sassenberg, K., Moskowitz, G. B., Jacoby, J., & Hansen, N. (2006). The carry-over effect of competition: The impact of competition on prejudice toward uninvolved outgroups. *Journal of Experimental Social Psychology, 43*(4), 529-538.

Schimel, J., Pyszczynski, T., Greenberg, J., O'Mahen, H., & Arndt, J. (2000). Running from the shadow: Psychological distancing from others to deny characteristics people fear in themselves. *Journal of Personality and Social Psychology, 78*(3), 446-462.

Schwartz, M. B., O'Neal Chambliss, H., Brownell, K. D., Blair, S. N., & Billington, C. (2003). Weight bias among health professionals specializing in obesity. *Obesity Research, 11*(9), 1033-1039.

Schwartz, M. B., & Puhl, R. (2003). Childhood obesity: A societal problem to solve. *Obesity Reviews, 4*, 57-71.

Sherif, M. (1954). Integrating field work and laboratory in small group research. *American Sociological Review, 19*, 759-771.

Sinclair, L., & Kunda, Z. Reactions to a Black professional: Motivated inhibition and activation of conflicting stereotypes. *Journal of Personality and Social Psychology, 77*(5), 885-904.

Snyder, C. R. & Fromkin, H. L. (1977). Abnormality as a positive characteristic: The development and validation of a scale measuring need for uniqueness. *Journal of Abnormal Psychology, 86*(5), 518-527.

Solomon, S., Greenberg, J., Pyszczynski. (1991). T. Terror management theory of self-esteem. In C.R. Synder & D. R. Forsyth (Eds), *Handbook of social and clinical psychology: The health perspective, Vol. XXII,* (pp. 21-40). Elmsford, NY: Pergamon Press.

Stunkard, A. J., & Albaum, J. M. (1981). The accuracy of self-reported weights. *The American Journal of Clinical Nutrition, 34*, 1593-1599.

Staffieri, R. (1967). A study of social stereotype of body image in children. *Journal of Personality and Social Psychology, 7*(1), 101-104.

Swann, W. B., Jr. (1996). *Self-traps: The Elusive Quest for Self-esteem*. New York: Freeman.

Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: old-fashioned and modern prejudices. *Journal of Personality and Social Psychology, 68*(2), 199-214.

Tabacknick, B. G., & Fidell, L. S. (2001). *Using Mulitvariate Statistics.* (4^{th} ed.). MA: Allyn & Bacon.

Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American, 223*, 96-102.

Tajfel, H, (1978). Social categorization, social identity and social comparison. In H. Tajfel (Ed.), *Differential between social group: Studies in the social psychology of intergroup relations.* London: Academic Press.

Turner, J. C. (1975) Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology, 5*, 5-34.

Von Hipple, W., Sekaquaptew, D., & Vargas, P. (1995). On the role of encoding processes in stereotype maintenance. In M.P. Zanna (Ed.), *Advances in Experimental Social Psychology. Vol.* 27 (pp. 177-254). Orlando, FL: Academic.

Watson, David, Clark, Lee A, & Tellegen, Auke. Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063-1070.

Weber, R. & Crocker, J. (1983). Cognitive processes in the revision of stereotypic beliefs. *Journal of Personality and Social Psychology, 45*(5), 961-977.

Wiese, H. J., Wilson, J. F., Jones, R. A., & Neises, M. (1992). Obesity stigma reduction in medical students. *International Journal of Obesity Related Metabolism Disorders, 16*, 859-860.

Worley, M. R. (2008) Fat and happy: In defense of fat acceptance. Retrieved May 1, 2008 from http://www.naafa.org/documents/essays/fatandhappy.html

Wyer, N. A. (2004). Not all stereotypic biases are created equal: Evidence for a stereotype-disconfirming bias. *Personality and Social Psychology Bulletin, 30*(6), 706-720.

Yalom, I. (1980). *Existential psychotherapy.* New York: Basic Books.

Ybarra, O., Stephan, W. G., Schaberg, L., & Lawrence, J. S. (2003). Beliefs about the disconfirmability of stereptypes: The stereotype disconfirmability effect. *Journal of Applied Social Psychology, 33*(12), 2630-2646.

Appendix A

The Anti-fat Attitudes Test (Lewis et al., 1997, α=.95)

Indicate how much you agree or disagree with the following statements:

Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly Agree
1	2	3	4	5

______1. There's no excuse for being fat

______2. If I were single, I would date a fat person.

______3. Jokes about fat people are funny

______4. Most fat people buy too much junk food

______5. Fat people are physically unattractive.

______6. Fat people shouldn't wear revealing clothing in public.

______7. If someone in my family were fat, I'd be ashamed of him or her.

______8. I can't stand to look at fat people.

______9. If fat people don't get hired, it's their own fault.

______10. Fat people are disgusting.

______11. If I have the choice, I'd rather not sit next to a fat person.

______12. Fat people don't care about anything except eating.

______13. I'd lose respect for a friend who started getting fat.

______14. Most fat people are boring.

______15. I can't believe someone of average weight would marry a fat person.

______16. Society is too tolerant of fat people.

______17. When fat people exercise, they look ridiculous.

______18. I hate it when fat people take up more room than they should in a theater or on a bus or plane.

______19. Most fat people are lazy.

______20. Most fat people don't care about anyone but themselves.

______21. Fat people are just as competent in their work as anyone else.

______22. If fat people really wanted to lose weight, they could.

______23. Being fat is sinful.

______24. It's disgusting to see fat people eating.

______25. Fat people have no will power

______26. I prefer not to associate with fat people.

______27. Fat people don't care about their appearance.

______28. Most fat people are moody and hard to get along with.

______29. If bad things happen to fat people, they deserve it.

______30. Most fat people don't keep their surroundings neat and clean.

______31. Society should respect the rights of fat people.

______32. It's hard not to stare at fat people because they are so unattractive.

______33. If I owned a business, I would not hire fat people because of the way they look.

______34. I'd feel self-conscious being seen in public with a fat person

______35. The idea that genetics causes people to be fat is just an excuse.

______36. I would not want to continue in a romantic relationship if my partner became fat.

______37. The existence of organization to lobby for the rights of fat people in our society is a good idea.

______38. I don't understand how someone could be sexually attracted to a fat person.

______39. If fat people knew how bad they looked, they would lose weight.

______40. People who are fat have as much physical coordination as anyone.

______41. Fat people are unclean.

______42. Fat people should be encouraged to accept themselves the way they are.

______43. Most fat people will latch onto almost any excuse for being fat.

______44. It's hard to take fat people seriously.

______45. Fat people do not necessarily eat more than other people.

______46. Fat people obviously have a character flaw, otherwise they wouldn't become fat.

______47. It makes me angry to hear anybody say insulting things about people because they are fat.

The Goldfarb Fear of Fat Scale (Goldfarb et al., 1985 α=.85)

Please read each of the following statements and select the number on the scale below which best represents your feelings and beliefs.

1----------------------2-----------------------3------------------------4

very untrue somewhat untrue somewhat true very true

______1. My biggest fear is of becoming fat.

______2. I am afraid to gain even a little weight.

______3. I believe there is a real risk that I will become overweight someday.

_____4. I don't understand how overweight people can live with themselves.

_____5. If I stopped concentrating on controlling my weight, chances are I would become very fat.

_____6. Becoming fat would be the worst thing that could happen to me.

_____7. There is nothing that I can do to make the thought of gaining weight less painful and frightening.

_____8. I feel like all my energy goes into controlling my weight.

_____9. If I eat even a little, I may lose control and not stop eating.

_____10. Staying hungry is the only way I can guard against losing control and becoming fat.

The Semantic Differential Task (adapted from Sassenberg et al., 2006)

The scales below represent a range of descriptors that can be applied to different people or groups of people; the ends of the scales represent polar opposites for each characteristic. Using the scales, please rate the following groups choosing the number on the scale that you feel best represents the group listed.

African Americans:

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 ------------- 2 ---------------- 3

Bad Good

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Negative Positive

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Useless Valuable

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Unpleasant Pleasant

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Awful Nice

Men:

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 ------------- 2 ---------------- 3

Bad Good

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Negative Positive

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Useless Valuable

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Unpleasant Pleasant

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Awful Nice

Women:

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 ------------- 2 ---------------- 3

Bad Good

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Negative Positive

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Useless Valuable

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Unpleasant Pleasant

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Awful Nice

Fat People:

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 ------------- 2 ---------------- 3

Bad Good

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Negative Positive

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Useless Valuable

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Unpleasant Pleasant

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Awful Nice

Psychologists:

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 ------------- 2 ---------------- 3

Bad Good

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Negative Positive

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Useless Valuable

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Unpleasant Pleasant

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Awful Nice

Feminists:

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 ------------- 2 ---------------- 3

Bad Good

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Negative Positive

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 -------------- 3

Useless Valuable

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Unpleasant Pleasant

-3 ------------ -2 -------------- -1 --------------- 0 --------------- 1 --------------- 2 ------------- 3

Awful Nice

The Feeling Thermometer

Please rate how you feel towards the groups listed below. Rate your feelings as if you are using a thermometer of feelings from 0 to 100 degrees, with 100 degrees being the most positive as possible. Fill in next to each group name a degree, please use only whole numbers.

_______ African Americans

_______ Men

_______ Women

_______ Psychologists

_______Fat People

_______Feminists

_______ Your Interaction Partner during the computer game

Appendix B

Positive and Negative Affect (Watson, Clark, & Tellegen, 1988, PAS α=.84, NAS α=.85)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way in general, that is, how you feel on average. Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

____ interested

____ distressed

____ excited

____ upset

____ strong

____ guilty

____ scared

____ hostile

____ enthusiastic

____ proud

____ irritable

____ alert

____ ashamed

____ inspired

____ nervous

____ determined

____ attentive

____ jittery

____ active

____ afraid

Modern Racism Scale (McConahay, 1986, α=.85)

Indicate how much you agree or disagree with the following statements:

Strongly Disagree Disagree Neither agree Nor disagree Agree Strong Agree

1----------------------2---------------------3----------------------4----------------------5

_____ 1. It is easy to understand the anger of black people in America.

_____ 2. Blacks have more influence upon school desegregation plans than they ought to have.

_____ 3. Blacks are getting too demanding in their push for equal rights.

_____ 4. Over the past few years blacks have gotten more economically than they deserve.

_____ 5. Over the past few years the government and news media have shown more respect to blacks than they deserve.

_____ 6. Blacks should not push themselves where they're not wanted.

_____ 7. Discrimination against blacks is no longer a problem in the United States.

Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2005, α=.80)

Please use the following scale to indicate the degree of your agreement or disagreement of the statements below. Record your numerical answer to each statement in the space provided preceding the statement. Try to describe your attitudes accurately and generally.

1	2	3	4	5
strong disagree	disagree	neutral	agree	strongly agree

_______ 1. If other people don't seem to accept me, I don't let it bother me.

_______ 2. I try hard not to do things that will make other people avoid or reject me.

_______ 3. I seldom worry about whether other people care about me.

_______ 4. I need to feel that there are people I can turn to in times of need.

_______ 5. I want other people to accept me.

_______ 6. I do not like being alone.

_______ 7. Being apart from my friends for long periods of time does not bother me.

_______ 8. I have a strong "need to belong."

_______ 9. It bothers me a great deal when I am not included in other people's plans.

_______ 10. My feelings are easily hurt when I feel that others do not accept me.

Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960, α=.75)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

T F 1. Before voting I thoroughly investigate the qualifications of all the candidates.

T F 2. I never hesitate to go out of my way to help someone in trouble.

T F 3. It is sometimes hard for me to go on with my work if I am not encouraged.

T F 4. I have never intensely disliked anyone.

T F 5. On occasion I have had doubts about my ability to succeed in life.

T F 6. I sometimes feel resentful when I don't get my way.

T F 7. I am always careful about my manner of dress.

T F 8. My table manners at home are as good as when I eat out in a restaurant.

T F 9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.

T F 10. On a few occasions, I have given up doing something because I thought too little of my ability.

T F 11. I like to gossip at times.

T F 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

T F 13. No matter who I'm talking to, I'm always a good listener.

T F 14. I can remember "playing sick" to get out of something.

T F 15. There have been occasions when I took advantage of someone.

T F 16. I'm always willing to admit it when I make a mistake.

T F 17. I always try to practice what I preach.

T F 18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.

T F 19. I sometimes try to get even, rather than forgive and forget.

T F 20. When I don't know something I don't at all mind admitting it.

T F 21. I am always courteous, even to people who are disagreeable.

T F 22. At times I have really insisted on having things my own way.

T F 23. There have been occasions when I felt like smashing things.

T F 24. I would never think of letting someone else be punished for my wrongdoings.

T F 25. I never resent being asked to return a favor.

T F 26. I have never been irked when people expressed ideas very different from my own.

T F 27. I never make a long trip without checking the safety of my car.

T F 28. There have been times when I was quite jealous of the good fortune of others.

T F 29. I have almost never felt the urge to tell someone off.

T F 30. I am sometimes irritated by people who ask favors of me.

T F 31. I have never felt that I was punished without cause.

T F 32. I sometimes think when people have a misfortune they only got what they deserved.

T F 33. I have never deliberately said something that hurt someone's feelings.

Existential Isolation Questionnaire (Long & Pinel, 2006, α=.80)

Please use the following scale to rate the extent to which you agree or disagree with each of the following statements. Place your answer in the blank next to each item.

1-------------2-------------3-------------4-------------5-------------6-------------7

strongly disagree   strongly agree

1.____ I usually feel like people share my outlook on life.

2.____ I often have the same reactions to things that other people around me do.

3.____ People around me tend to react to things in our environment the same way I do.

4.____ I regularly seek out people who think about things in the same way that I do.

5.____ People do <u>not</u> often share my perspective.

6.____ If I could choose to spend time only with people who understand me, I would.

7.____ I want other people to feel the way I do.

8.____ I want to find signs that other people share my experience of the world around me.

9.____ Other people usually do <u>not</u> understand my experiences.

10. ____ I want to be with people who share my outlook on life.

11. ____ People often have the same "take" or perspective on things that I do.

12. ____ It is important to me to feel like other people experience the world in the same way I do.

Egalitarianism/Humanitarianism (Katz & Hass, 1988, α=.84)

Please use the following scale to rate the extent to which you agree or disagree with each of the following statements. Place your answer in the blank next to each item.

1--------------2--------------3--------------4--------------5--------------6

strongly disagree strongly agree

______1. One should be kind to all people.

______2. One should find ways to help others less fortunate than oneself.

______3. A person should be concerned about the well-being of others.

______4. There should be equality for everyone, because we are human beings.

______5. Those who are unable to provide for their basic needs should be helped by others.

______6. A good society is one in which people feel responsible for one another.

______7. Everyone should have an equal chance and an equal say in most things.

______8. Acting to protect the rights and interests of other members of the community is a major obligation for all persons.

______9. In dealing with criminals the courts should recognize that many are victims of circumstances.

______10. Prosperous nations have a moral obligation to share some of their wealth with poor nations.

Modern Sexism (Swim, Aikin, Hall, & Hunter, 1995, α=.75)

Please use the following scale to indicate the degree of your agreement or disagreement of the statements below. Record your numerical answer to each statement in the space provided preceding the statement. Try to describe your attitudes accurately and generally.

1----------------2-----------------3----------------4-----------------5

strong disagree disagree neutral agree strongly agree

______1. Discrimination against women is no longer a problem in the United States.

______2. Women often miss out on goods jobs due to sexual discrimination.

______3. It is rare to see women treated in a sexist manner on television.

______4. On average, people in our society treat husbands and wives equally.

______5. Society has reached the point where women and men have equal opportunities for achievement.

______6. It is easy to understand women's groups in America.

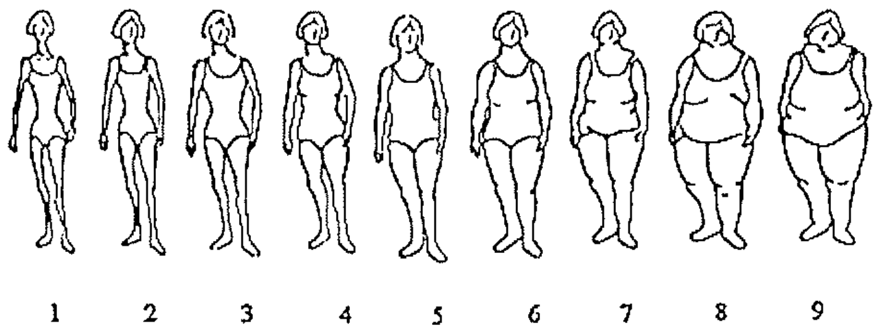
______7. It is easy to understand why women's groups are still concerned about societal limitation of women's opportunities.

______8. Over the past few years, the government and news media have been showing more concern about the treatment of women than is warranted by women's actual experiences.

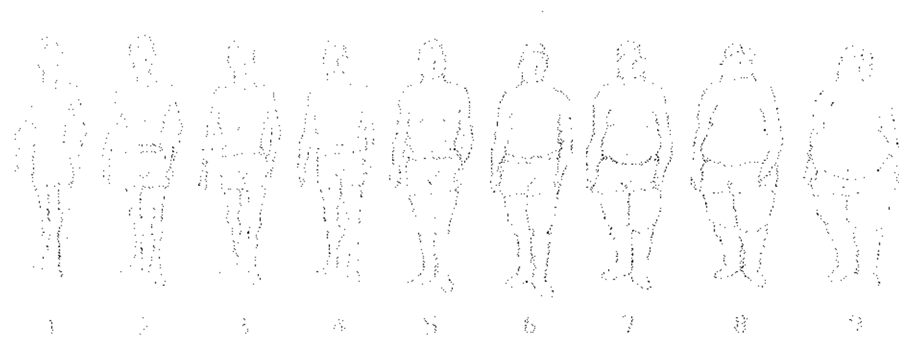
Appendix C

Figure rating scales (Rozin & Fallon,1985)

Female figure rating scale



Male figure rating scale



Appendix D

Getting to know your interaction partner

Before you begin the online interaction with your partner, we would like you to answer the following questions about yourself. The answers that you provide will be shared with the other participant in the study. These questions are meant to help you get to know the person with whom you'll be interaction. Please answer as honestly and accurately as possible.

1. Please enter a nickname that you would like to be identified by throughout the study.
2. What is your age?
3. What is your gender? 1=female 2=male 3=transgender female
   4=transgender male 5=other
4. Are you Hispanic? 1=Yes 2=No
5. What is your race/ethnicity? 1=Black/African American
   2=White/Caucasian 3=Asian 4=American Indian or Alaskan Native
   5=Native Hawiian or Other Pacific Islander 6=Multiracial 7=Other
6. What is your height? (enter height in feet and inches)
7. What is your weight?
8. What weight group would you place yourself in? 1=lightweight
   2=medium weight 3=heavyweight
9. Which color best describes your hair color? 1=black 2=brown 3=blond
   4=red 5=gray
10. How long is your hair? 1=short 2=medium 3=long
11. What is your eye color? 1=blue 2=brown 3=green 4=hazel
12. Are you a student? 1=yes 2=No
13. What is your major?
14. After you leave college, what job would you like to hold?
15. What is your favorite food?
16. What was the main dish that you ate for dinner last night?
17. How many hours a week do you exercise?
18. What is the activity that you typically do for exercise?
19. How many hours of television do you watch each week?
20. Who is your favorite character on television?
21. Please choose a figure that best represents how you view your body
22. Are you currently on a diet? 1=Yes 2=No

Appendix E

Imaginiff Questions

1. If Colin Powel were a sea creature, he would be: A) hammerhead shark B) crab C) octopus D) dolphin
2. If Martha Stewart were a musical instrument, she would be: A) violin B) triangle C) organ D) saxophone
3. If Whoopi Goldberg were a plant, she would be: A) dried flower B) Venus fly trap C) Kudzu D) red rose
4. If Russell Crowe were a flying object, he would be: A) blimp B) glider C) Lear Jet D)frisbee
5. If Howard Dean were a power source, he would be: A) coal B) nuclear C) steam D) 9 volt battery
6. If Hillary Clinton were a writing implement, she would be: A) chalk B) spray paint C) fountain pen D) crayon
7. If Halle Berry were an insect, she would be: A) butterfly B) praying mantis C) ant D)wasp
8. If Will Smith were a mode of transport, he would be: A) jogging B) hot rod C) corporate jet D) pogo stick
9. If Jennifer Aniston were a tool, she would be: A) cocktail mixer B) screwdriver C) sledge hammer D) toenail clippers
10. If Michael Jordan were a light source, he would be: A) laser beam B) flashlight C) sun D) lightning
11. If Oprah Winfrey were a thing to look through, she would be: A) telescope B) reading glasses C) rose colored glasses D) safety goggles
12. If George Bush were a toy, he would be: A) chemistry set B) teddy bear C) Transformers D) play dough

Appendix F

Liking questionnaires (adapted from Pinel & Long, under revision)

Indicate how much you agree or disagree with the following statements:

Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly Agree
1	2	3	4	5

To what extent do you feel close to Alex?

To what extent could you imagine becoming friends with Alex?

To what extent would you feel comfortable meeting Alex?

To what extent would you look forward to meeting Alex?

To what extent would you like Alex to be your coworker?

To what extent do you like Alex?

How similar do you feel Alex is to you?

Tables

Table 1: Mean liking scores for interaction partner by I-sharing and stereotypicality condition

Stereotypicality Condition	I-sharing Condition	Mean	Standard Error
Confirming	I-sharing	4.283	0.35
	Control	4.582	0.375
	No I-sharing	3.675	0.331
Disconfirming	I-sharing	4.903	0.333
	Control	4.061	0.34
	No I-sharing	3.556	0.333

Table 2: Mean Anti-fat Attitudes scores for I-sharing and stereoticality conditions.

Stereotypicality Condition	I-sharing Condition	Mean	Standard Error
Confirming	I-sharing	2.079	0.072
	Control	2.125	0.077
	No I-sharing	2.042	0.068
Disconfirming	I-sharing	2.255	0.068
	Control	2.102	0.07
	No I-sharing	2.088	0.068

Table 3: Mean Semantic Differential scores for I-sharing and stereotypicality conditions.

Stereotypicality Condition	I-sharing Condition	Mean	Standard Error
Confirming	I-sharing	1.675	0.207
	Control	1.746	0.224
	No I-sharing	1.804	0.198
Disconfirming	I-sharing	1.822	0.198
	Control	1.635	0.202
	No I-sharing	1.603	0.199

Table 4: Mean feeling thermometer scores by I-sharing and stereotypicality conditions

Stereotypicality Condition	I-sharing Condition	Mean	Standard Error
Confirming	I-sharing	82.742	2.851
	Control	79.017	3.098
	No I-sharing	80.692	2.72
Disconfirming	I-sharing	82.811	2.72
	Control	74.494	2.798
	No I-sharing	80.074	2.729

Table 5: I-sharing, stereotypicality, and fear of fat for outcome of liking

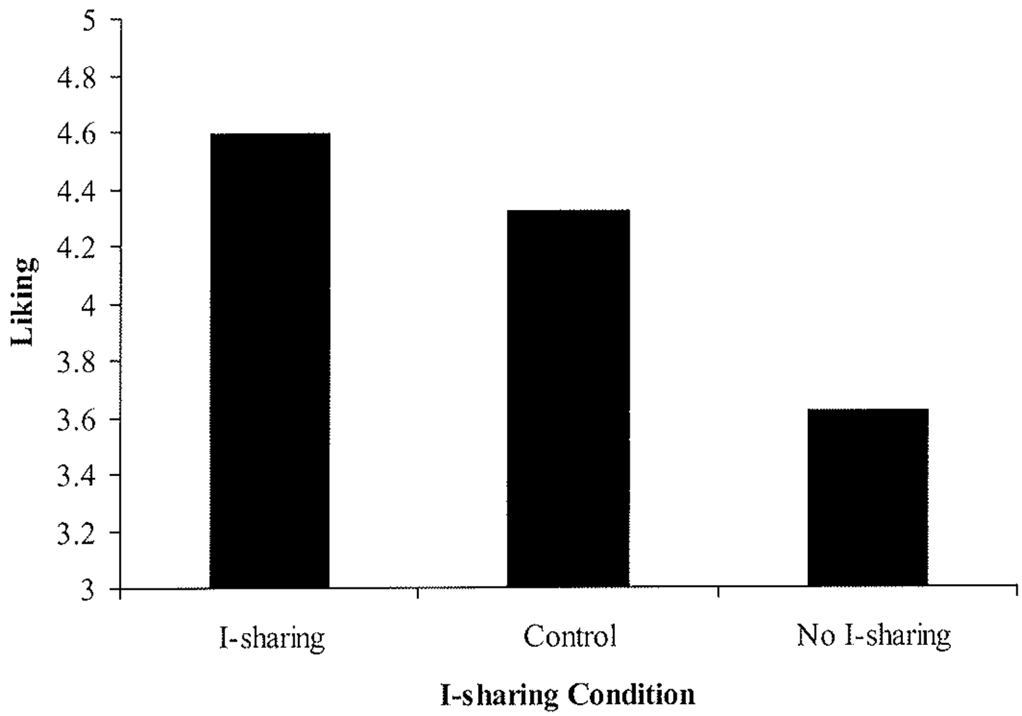
	R^2	ΔR	B	t	*p*
Step 1	0.005	0.005			
objective similarity			-0.083	-0.784	*ns*
Step 2	0.063	0.058			
objective similarity			-0.109	-1.046	*ns*
stereotypicality condition			0.029	0.145	*ns*
I-sharing 1			0.515	2.539	<.05
I-sharing 2			-0.092	-0.44	*ns*
Fear of Fat			-0.101	-0.378	*ns*
Step 3	0.154	0.091			
objective similarity			-0.147	-1.421	*ns*
stereotypicality condition			-0.025	-0.177	*ns*
I-sharing 1 (I-sharing to No I-sharing)			0.582	2.902	<.01
I-sharing 2 (I-sharing to control)			-0.142	-0.693	ns
Fear of Fat			0.038	0.141	*ns*
I-sharing 1 X stereotypicality			0.153	0.755	*ns*
I-sharing 2 X stereotypicality			0.292	1.432	*ns*
Fear of Fat X stereotypicality			-0.352	-1.399	*ns*
Fear of Fat X I-share 1			0.737	2.22	<.05
Fear of Fat X I-share 2			0.103	0.29	*ns*
Step 4	0.161	0.007			
objective similarity			-0.14	-1.336	*ns*
stereotypicality condition			-0.016	-0.112	*ns*
I-sharing 1 (I-sharing to No I-sharing)			0.611	2.99	<.01
I-sharing 2 (I-sharing to control)			-0.153	-0.738	*ns*
Fear of Fat			-0.002	-0.007	*ns*
I-sharing 1 X stereotypicality			0.16	0.785	*ns*
I-sharing 2 X stereotypicality			0.3	1.463	*ns*
Fear of Fat X stereotypicality			-0.299	-1.157	*Ns*
Fear of Fat X I-share 1			0.725	2.169	<.05
Fear of Fat X I-share 2			0.064	0.175	*Ns*
Fear of Fat X I-share 1 X stereotypicality			0.273	0.812	*Ns*
Fear of Fat X I-share 2 X stereotypicality			0.069	0.186	*Ns*

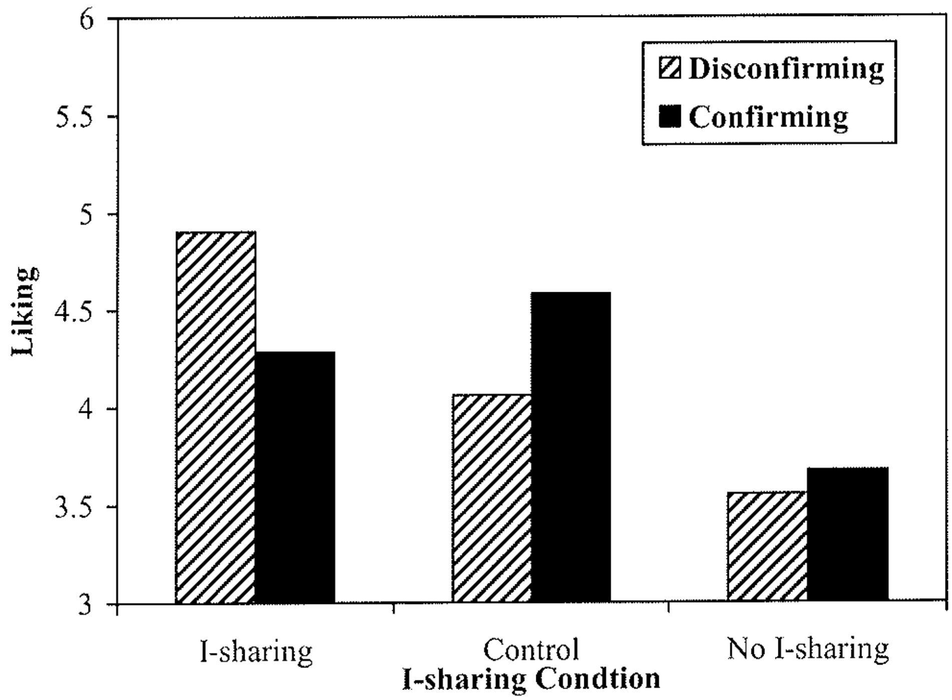
Figure Caption

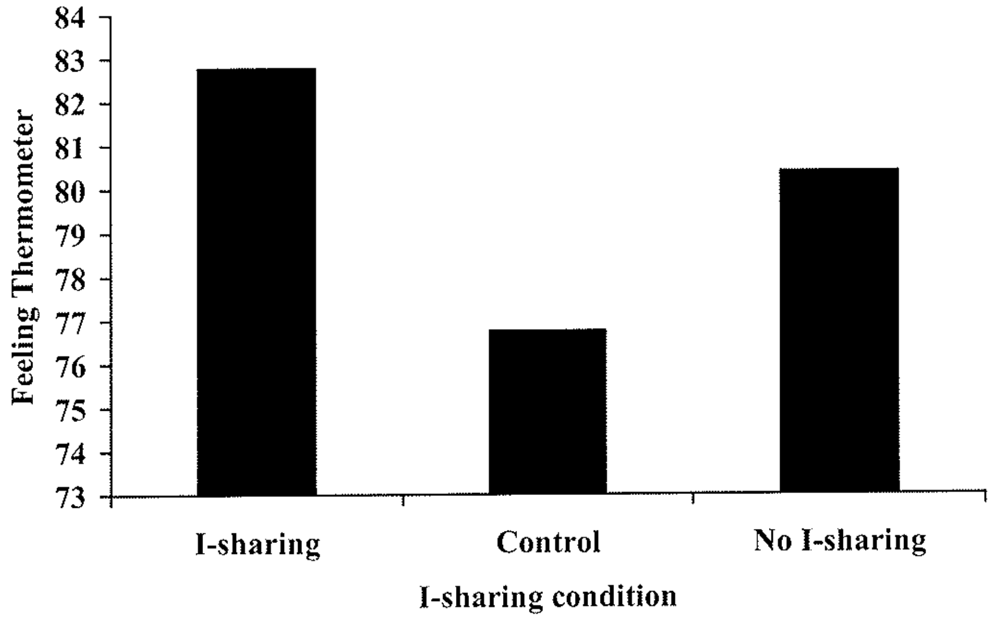
Figure 1. The effect of I-sharing on Liking.

Figure 2. The effect of I-sharing and stereotypicality on Liking.

Figure 3. The effect of I-sharing on the Feeling Thermometer for Fat People.


5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
Liking
I-sharing
Control
No I-sharing
I-sharing Condition


Disconfirming
Confirming
Liking
6
5.5
5
4.5
4
3.5
3
I-sharing
Control
No I-sharing
I-sharing Condtion


84
83
82
81
80
79
78
77
76
75
74
73
Feeling Thermometer
I-sharing
Control
No I-sharing
I-sharing condition